SMALL SCALE BUSINESSES IN ZAMBIA: THEIR ROLE IN EMPLOYMENT CREATION

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ABSTRACT

The study investigated Zambian government's belief that small manufacturing firms can provide employment particularly to the ever growing jobless school drop-outs. The objectives were to: (a) measure the job creation capacity of small firms; (b) determine the attitudes of Copperbelt University's School of Business and Industrial Studies' (SBIS) students and graduates towards starting businesses and adequacy of education received; (c) examine effects of the Zambian leadership code on the creation of small businesses; (d) find out the role of government and small business support institutions in promoting small businesses.

The four main results were firstly, that small firms significantly generated more employment than large firms over ten years. Secondly, among the four main entrepreneurship theories discussed, Chells' environmental-situational-personal model, was more applicable to Zambia since no single model explained the process of entrepreneurship. This however demanded, '*inter alia*', a high level of education and own capital.

Thirdly, government's role in small business promotion, directly and through its agency (SIDO), was practically negligible and to some extent negative. Financial institutions and local authorities had virtually no programmes for small firms. Fourthly, SBIS students and graduates had, on the whole, positive attitudes towards starting businesses and educational preparations received at SBIS for working in large or small firms (but not for business ownership). Over a period of six years, none had selected entrepreneurship as a career upon graduation. Only one initiated a business later. Training of graduates for

work in small and large firms through the Bachelor of Accountancy degree (BAc) was found to be unacceptable to employers.

Major recommendations included firstly, the need for the government to: (a) take a greater promotional role; (b) abolish the Zambian leadership code; (c) encourage local authorities to be more responsive and (d) promote entrepreneurship in higher educational institutions, among government's and parastatals' employees. Second, SBIS was strongly advised to: (a) re-evaluate some courses; (b) introduce small business majors and Graduate Enterprise Programme; (c) extend the present BAc into a professional qualification and co-ordinate with professional bodies; (d) enable academic staff gain industrial experience.

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I dedicate this thesis to my father and mother

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who have encouraged me throughout my educational stages

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to keep my mother, who was seriously ill through out my last two years of study,

ALIVE

Until I completed this study.

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ABBREVIATIONS USED IN THE RESEARCH

AFC	African Farming Company
BOLTON REPORT or COMMITTEE	- Report of a Committee of Inquiry on Small firms, British Parliamentary papers, 1971,Cmnd 4811
BOZ	Bank of Zambia
BSAC	British South African Company
CBU	Copperbelt University (formerly, UNZANDO: University of Zambia, at Ndola).
CIDA	Canadian International Development Agency
CIPEC	Copper Industries Producing and Exporting Countries
CSOL	Central Statistical Office - Lusaka
DBZ	Development Bank of Zambia
FES	Friedrich-Ebert Stifting (Socio-economic Foundation registered in the Federal Republic of Germany).
FMO	Netherlands Development Finance Company
FNDP	First National Development Plan
IFAD	International Fund for Agricultural Development (administered by DBZ)
ILO/SATEP	International Labour Organisation/ Southern African Team for Employment Promotion
LME	London Metal Exchange
IMF	International Monetary Fund
MACMILLAN	REPORT or COMMITTEE - Macmillan Committee Report on Finance and Industry, British Parliamentary papers, 1931, Cmnd, 3897
MAS	Management and Accounting Service (provided by SEP)
MDPNG	Ministry of Development Planning and National Guidance
MINTA	SEP's Minta Transport Company
NCDP	National Commission for Development Planning
4TH NDP	Fourth National Development Plan
NORAD	Norwegian Agency for International Development
RUCOM	Rucom Industries Limited, a Company registered under the Companies Act
SATEP	Southern African Team for Employment Promotion
SBA	Small Business Administration , USA
SEP	Small Enterprise Promotion Ltd., Subsidiary of Development Bank of Zambia.
SEPREC	SEP Real Estate Limited Company
SFRD	Special Fund for Research and Development donated by NORAD and CIDA
SIDO	Small Scale Development Organisation - Zambia
SIF	Small Industries Fund (provided by DBZ)
SNFP	Second National Development
SSE	Small Scale Enterprises
SSI	Small Scale Industry(ies)
TNDP	Third National Development Plan
UDI	Unilateral Declaration of Independence (in formerly Rhodesia, now Zimbabwe)
UNCTAD	United Nations Commission for Trade and Development
UNDP	United Nations Development Programme
UNZA	University of Zambia
UNZANDO	University of Zambia at Ndola (Now, CBU: Copperbelt University
VIS	Village Industry Service
ZCTU	Zambia Congress of Trade Unions
ZICA	Zambia Institute of Certified Accountants Association
ZJB	Zambia Journal of Business
ZNCB	Zambia National Commercial Bank

SUMMARY AND ORGANISATION OF THE RESEARCH STUDY

1. SUMMARY OF THE RESEARCH STUDY

Over the past five years, the Zambian Government has shown great interest in the possible contributions of small scale business organisations in the social and economic development of the country. It is believed that the small scale sector can and provide new products and services needed by and suitable for the local markets. Further, it is believed that this sector can provide significant employment to the ever growing jobless population of school drop-outs, especially at grades VII, X, and XII (Third National Development Plan-TNDP 1979-1983, 1979:22). Still further, it is expected that small businesses can play a vital role in bridging the rural-urban gap in income distribution by providing additional employment opportunities to the rural areas where Zambia's 60% of the total population used to live without an industrial base to support them.

These views are reflected in government policy statements at political meetings, official forums and in the official government document, the 'Third Five Year National Development Plan 1979-1983'.

The objectives of this research study were to:

1) Formulate a better definition of small scale businesses;
2) Measure the extent to which in one sector (the manufacturing sector), small firms can create more jobs than its counterpart, the large firms and
3) Determine the role the government can play in entrepreneurial and small business formation through Small Industries Development Organisation (SIDO);

4) Find out the attitudes of potential entrepreneurs (Copperbelt University's School of Business and Industrial studies - SBIS) towards preparations for business start ups;

5) Discover the attitudes of these potential entrepreneurs towards working in small businesses and selecting business start up for their career;

6) Determine the roles played by small business supporting agencies.

These phenomena were then related to several explanatory variables which included, small businessmen's, student's, graduate's and their parental characteristics, small business operational variables such as financial requirements for business start ups and loan acquisitions.

The study basically utilised primary data collected employing a total of four surveys, conducted in Zambia over a period of seven months from July, 1986 to January, 1987. Two postal questionnaires were aimed at two groups of potential entrepreneurs - students numbering 181 and graduates totalling 254 from the school of business and Industrial studies (SBIS) of the Copperbelt University. The third survey was a standardised personal interview of businessmen drawn proportionately from the two urban provinces (of Zambia's eight provinces), The Copperbelt and Lusaka. The fourth survey was also a personal interview directed at 17 key small business supporting agencies. These were the government (through the Ministry of Commerce and the Bank of Zambia small business Department), a government and a private small business supporting agencies (i.e. SIDO and SEP), financial organisations and district councils.

Secondary data was used where appropriate and in particular in the background to the study, in the search for a small business definition and in the discussion of theoretical concepts.

The results of three of the four surveys were analysed using SPSS-X programme. Four major statistical techniques determined useful for the wide variety of variables were the contingency table employing Chi-square for categorical variables, the student's t-test for employment creation, one way analysis of variance (ANOVA) for quantity variables and factor analysis for student's and graduates attitudes towards influencing factors for working in small firms, and all respondents' attitudes towards leadership code. Content analysis was applied for the small business supporting agencies.

The most important results of the study were nine. First, it was revealed that small businesses created more employment than large firms. Second findings conclusively showed that the process of business formation in Zambia demanded a knowledgeable person with at least secondary school of education. Third, evidence verified that students and graduates from the School of Business and Industrial Studies (SBIS) of the Copperbelt University (CBU) had positive attitudes towards business start up. But virtually all graduates selected salaried employment due to resource constraints in forming their own businesses. Fourth, although SBIS graduates were not negative towards seeking employment in small firms, the greatest majority got jobs in medium to very large private and parastatal sectors. Fifth, SBIS students and graduates had favourable views towards the

preparations received from the university particularly for working in small or large organisations. But they were not very positive for the training they received in business start up. Sixth, accounting graduates' experience had shown that the accounting degree (BAc) had not been accepted by industry. This resulted in seeking further professional training. Seventh, Government's small business stimulatory policy was non-existent. Respondents would however support a government policy of providing assistance to small firms. Eighth, lending policies of financial institutions were unfavourable to small firms. Ninth, local authorities have no supportive policies towards small firms.

Results from the study will inevitably be beneficial to various groups including the government, SIDO, small businessmen, the School of Business and Industrial Studies, SBIS graduates and researchers.

2. ORGANISATION OF THE RESEARCH STUDY.

The thesis is built around five major parts. Part I, is the general introduction and background to the study. It contains two chapters. After providing a working definition of a small firm and raising it as an issue for discussion in technical appendices 1A1 and 1A2, the first chapter explains what the study attempts to investigate. It also defines the general, specific and project problem areas. These are: unemployment, entrepreneurial formation and job creation, characteristics of businessmen and government's small business policy.

Chapter 2 reviews prior research done on small firms relevant to this study. This includes scrutinizing, entrepreneurship, which is built around four main relevant models, or theories to small business stimulation. Technical appendix 2A provides a detailed analysis of these theories. They are designed to provide useful information on understanding entrepreneurship, the decision process underlying the choice to become one and approaches to recognition of these entrepreneurs. Apart from serving this role as a theoretical foundation for this study, entrepreneurship models are beneficial in determining their applicability to the Zambian small businessmen through extrapolation. The same appendix discusses demand and supply of entrepreneurs.

The purpose of prior research is to identify a specific niche on which this research should concentrate. This is done in the main body of chapter 2 where justification for conducting this research and the value expected to be derived from it are also done. The chapter concludes by setting the hypotheses and objectives of the study.

Section II which is devoted to a detailed literature survey of Zambian society's political, economic and social characteristics as well as the specific role of small businesses in Zambia and the wider environment contains two chapters. Chapter 3 presents a detailed discussion of the background to the problem understudy by looking at the unemployment problem, its definition, its origin and attempted solutions. In chapter 4, the role of SIDO and small-scale businesses in Zambia are presented. This is related to the wider debate on the role of

small firms in developing and developed countries. Discussion of this background is beneficial in understanding the problem understudy, notably why the research was embarked upon and its potential. This is also fundamental in grasping the logic behind the setting of research objectives. The information provided in this chapter is helpful in evaluating the constraints to the government's small business policy, its implemention and the likely difficulty of its success.

Section III concentrates on research design and methodology. The former examines the type of research design that this study followed. The later deals with the underlying choice process for data collection, statistical data analysis techniques and methods of administering the survery project as well as data collection fieldwork experiences. Research design, survey population, determination of sample size and alternative versus selected data collection methods are fully discussed in technical appendix 5A1. But technical appendix 5A2 appraises and selects the most appropriate and helpful techniques for analysing the field work. The main text in Chapter 5 is limited to the discussion of the manner in which the field work was actually conducted, data collected, response rates and the actual experiences and problems encountered in doing the field work.

The last part, section IV, deals with analysis of the survey results in chapters 6 through 10. Discussion of the same is done in chapter 11 to bring out the implications of the study before attempting to draw conclusions and recommendations, to the government and other policy makers which include as SIDO The University of Copperbelt, local authorities and financial houses.

SMALL SCALE BUSINESS IN ZAMBIA: THEIR ROLE IN EMPLOYMENT CREATION

SECTION 1 - GENERAL INTRODUCTION AND BACKGROUND TO THE STUDY

CHAPTER 1 - DEFINITION OF A SMALL FIRM, GENERAL AND SPECIFIC PROBLEM AREAS

1.1 INTRODUCTION

The three aims of this chapter are first, to present the usage of the term "small-scale industry" in Zambia and a working definition for the meaning of a small firm developed for this study. The second aim is to introduce the purpose of the study by identifying the general, specific and research problem areas. These are: (a) unemployment; (b) role of small firms in employment creation; and (c) entrepreneurial and job creation in the small manufacturing sector. The third aim is to provide justification for choosing this sector.

1.2 DEFINITION OF A SMALL BUSINESS

In Zambia, section 2 of the small Industries Development Organisation defines the small scale industry as small scale enterprises and village enterprises. A small scale enterprise is one with capital of not more than K250,000. A village enterprise refers to one which

a) is located in a village, rural or semi-urban area;
b) uses labour intensive processes;
c) uses local raw materials.

Refer to chapter 4 for a discussion of the role of the government and SIDO in small scale business promotion.

A definition for a small firm has been developed and adopted in this study (see technical appendix 1A1, 1A2 and chapter 7). A small firm is:

> A commercial organisation that is managed by at most three managers, or having not more than 50 workforce including owners, family members or part-time employees in all establishments falling within an enterprise.

Refer to technical appendix 1A1 for the wider debate on the question of appropriate definition of a small business, previous and current scientific approaches to defining the small business as well as their application in selected countries. See technical appendix 1A2 for a critique of the present definitions and usage, based on the above literature review. This reveals their weaknesses while generating the framework for deriving the definition. For the more relevant and clear definition for this study, given above, which was empirically developed refer to chapter 7.

1.3. PURPOSE OF THE STUDY

The primary purpose of this study was to investigate the validity of the Zambian Government's assumption that small firms perform better, and in particular in the creation of employment than large firms. It is contended that "investment made in the [small] sector creates more employment opportunities" (SIDO, 1983 (a): 2). One of the high priorities given to the manufacturing sector during the Third Year National Development Plan 1979-1983 was "the establishment of small industries particularly in the rural areas" (NCDP, 1979: 239, NCDP, 1987: 51). An organisation, Small Industries Development Organisation (SIDO), has been

established to foster and encourage the "development of small scale industries" (NCDP, October, 1979: 250) "... to increase employment opportunities" (NCDP, July 1987:5). The study therefore sought to investigate whether small firms create more employment than large firms.

The secondary motive was to find out the characteristics (such as education, family background, experience etc.) of the formal sector[1] small businessmen in Zambia. The findings will help in determining whether school dropouts, particularly at grade 7 and below will be able to find self-employment in small-scale firms as the government asserts.

The third aim was to find out whether one potential group (SBIS graduates) could be counted upon as an alternative force in creating businesses upon graduation and whether they felt the attained university education adequately prepared them to start their own businesses or work in small or large organisations.

The fourth aim was to ascertain:

1) The extent to which SIDO has been successful in
   a) promoting the creation of new firms; and
   b) in providing assistance and incentives to both new and existing entrepreneurs;
2) The types of incentives and programmes (such as fiscal and monetary) given either through SIDO and/or the government;
3) The extent of narrowing of the rural-urban gap through encouraging the formation of small scale firms.

The fifth purpose was to search for a better definition of small-scale business to be adopted in Zambia.

The impetus to conduct this research arose from observations of the great interest shown by the Zambian Government in small firms development since 1978. It is believed by the government that small scale businesses can produce and provide new products and services needed by and suitable for the local markets (National Commission for Development Planning - NCDP, 1979: 57, 58 & 42 SIDO, 1983 (a)). Further, it is argued by the government that this sector can provide significant employment to the ever growing jobless population of school drop-outs, especially at grades VII, X and XII levels (NCDP, 1972:22 & 412). One of the major purposes of the Government in embarking on the small business policy is therefore "to reduce youth unemployment". Still further, it is thought by the government that small businesses can play a vital role in bridging the rural-urban gap in income distribution by providing additional employment opportunities to the rural areas. The majority of Zambia's total population used to live in these villages, about 82% in 1977 (NCDP, 1979). But there is no industrial base to support them (NCDP, 1979: 241-242, 248; Beveridge and Obershall, 1979:182).

These views are reflected in government policy statements not only at political meetings, official forums but also in the official government document on the country's national development plans, the Third Five Year National Development Plan 1979-1983. These efforts culminated in the passing of the 1981 SIDO ACT which established the small Industries Development organisation in December, 1982, under the auspices of the Ministry of Industry, Commerce and Foreign Trade (NCDP, Oct. 1979: 251).

The initial literature survey and personal contact with SIDO revealed that there has been virtually no research on the formal small business sector in Zambia. The few studies that have been carried out have concentrated almost entirely on the informal sector.

Subsequent literature review of research done on developing countries of Africa, by researchers from developed countries revealed that few studies have been conducted on small businesses and no specific study on Zambia. The issue of prior research is taken up later in more details in chapter 2.1.

It appears that there is a gap in the knowledge of the small business sector and in particular:

1) the characteristics of the Zambian entrepreneur, which would be useful in identifying him;
2) the number of firms that are being formed;
3) how such firms perform;
4) number of jobs that are created compared to large firms in the manufacturing sector;
5) small businessmen's problems and their attitudes towards government's assistance programmes;
6) types of programmes and incentives provided;
7) attitudes towards government policy of promoting small businessmen.
8) Awareness of business promotional agencies; and
9) graduates' attitudes towards UNZA educational programmes for business start up.

This information is critical to assist the government, SIDO and other promotional agencies, and financial houses in making

decisions. The small business community will also benefit from spin off effects in getting better services from these organisations.

1.4 STATEMENT OF THE GENERAL PROBLEM AREA: UNEMPLOYMENT

1.4.1 POPULATION

In 1987 Zambia's population was approximated to be 7.2 million as opposed to 5.7 million in 1980 (NCDP, January, 1987: 51) as against 4.1 million people in 1969 (NCDP, December, 1988: 68). The population growth rate in Zambia is quite high, having been 3.1% between 1969 and 1980 annually (CSO, 1980: Vol. V, Table 1.2.7). In 1988, the annual growth rate was put at 3.8% since 1980 (NDCP, January, 1988: 13). It is " higher than that of both the world average and the average for the whole of Africa" (NCDP, January, 1988: 27). It has been estimated that if the present levels of fertility and mortality continued, the population would double from 5.7 million in 1980 to 11.9 million in the year 2000. (CSO, 1980: Vol. V, Table 1.2.7).

Three of the important characteristics of Zambia's population are (Badouille, UNDP, 1987:1):

a) Youthfulness: about 50% (49.6%) of Zambia's population is under 15 years of age while those under 19 years accounted for nearly 60% (58.7%) in 1987 (NCDP, January, 1988: 52). The working age population (15-64) years accounts for 47.4% (CSO, 1980: Vol. III, table 2.3.8);

b) High rate of urbanisation: In 1987, population concentration in urban areas was estimated to be 46% of the population compared to 44% in 1980 (or approximately 2.5

million out of 5.7 million). If the prevailing trend continues it is projected that about 5 million people in Zambia will be living in urban areas by the year 2000.

c) Low education of the population: In 1980, approximately 42.2% of the population 5 years and above was illiterate while 48.1% had between lower and upper primary school levels of education (CSO, 1980: Vol. II, table 8.1.175). This means that about 84.3% of the population had no schooling or had primary level of education only. About 10% had senior secondary school and above.

1.4.2. Unemployment Problem

Since Zambia's independence in 1964, there has been a great emphasis by the government on job creation (Dodge, 1971). Unemployment and inflation are the two basic features and problems of the Zambian economy and are likely to continue for several years, according to the five year 1979-1983 Third National Development Plan (TNDP) unless specific policy measures are taken to fight the problem (TNDP, 1979: 4).

The unemployment plight is very serious indeed. It is most critical among the youth between the ages of 15 and 25 years, especially those living in the urban areas. As an example, out of an estimated population of 6.4 million people in 1983, with an anticipated labour force of nearly 2 million (31% of the population), wage-paid employment was only 363, 800 (about 20% of the labour force) (NCDP, 1979: 55). Refer to chapter 3.3 for a detailed discussion and charts of unemployment problem.

It is worth noting that in 1980, the contributions to total employment of 378,300 were 141, 280 (37%), 144,180 (38%) and 93,800 (25%) by the public organisations[2], parastatal organisations and private business firms respectively. The trend of the manufacturing sectors' share has ranged from 9% to 13% over the last twenty years (Central Statistical Office, Lusaka (CSOL), April, 1983: 10-11, 16).

Although the labour force is described as 2 million and male-paid employment as being only 383,800, more people are said to be economically active. The 1980 census defined labour force to be all those persons aged 12 years and above (UNDP, 1987: 2)[3]. About 3.3 million persons were recorded in this category, of whom 3.2 million were Zambians. Out of the total Zambian labour force, approximately 1.7 million (54% of the population aged 12 years and above) were reported as economically active). That is working (in formal and informal sectors) and seeking work. But the rest, 1.5 million were economically inactive (e.g. full time housewives, students, disabled pensioners etc.).

In Zambia's case the unemployment situation has been due to both economic and social reasons. On the first factor, performance of the Zambian economy in all sectors has been depressing since 1972 and specifically since 1975. The growth in the Gross Domestic Product (GDP), at constant 1965 prices was only 2% between 1971 and 1978. By 1983, the GDP had not surpassed the 1975 level of K1518 (£807.8) million compared to K1677 million at constant 1970 prices (MCDP, 1979:1).

This stagnation is attributed to both external and internal factors (MCDP, 1979:1-4). The former include:

a) unstable low copper prices, at the London Metal Exchange (LME), yet copper accounts form over 85% of Zambia's foreign earnings;

b) weather conditions (poor rain fall);

c) stagnation in the industrial world;

d) fuel crisis of 1975; and

e) disruption of communication routes due to civil and liberation wars in neighbouring countries and the consequent closure of the border with Zimbabwe (formerly Rhodesia).

The latter include:

a) the poor pattern of maintenance and replacement;

b) importation and utilisation of highly capital-intensive technology;

c) predominance of large firms (NCDP, 1979: 55-57);

d) investment in social infrastructure and services;

e) inefficient use of capital resources; and

f) inability of the central and local governments in carrying out the plans.

Consequently since 1975, poor performance has been exhibited by almost all business organisations. Most have been retrenching their labour force instead of increasing. Government sources of revenue, needed for investment to create jobs have also declined.

Apart from the world wide and Zambian economic constraints referred to above, the problem of unemployment in Zambia has been compounded by social factors:

a) large numbers of school dropouts (Hopper, 1983: 18; Coombe, 1987 and 1988);

b) population explosion especially among the youth (Todd, 1978: 7);

c) rural-urban migration in search of employment, (NCDP, 1979: 55-58).

These reasons are fully discussed in the next chapter. The consequence of this difficulty, has been intensified pressure on the politicians to "generate massive employment opportunities" (NCDP, July 1987: 18) "to absorb the rapidly growing labour force through adoption of appropriate low-cost labour intensive techniques" (NCDP, October 1987: 3). To underscore the present critical situation, Zambia's Prime Minister, Kebby Musokotwane, has recently called upon the leadership and all organisations to find practical solutions to the youth unemployment problem as theories have produced no results (Times of Zambia, April, 1985:1).

The acute unemployment problem and government concern is not limited to Zambia, but is common in other developing countries such as Zimbabwe (Mkandawire, 1983: 20) and Lesotho. Immediately upon independence in 1980, the government of Zimbabwe, declared "generation of employment" as one of its urgent "major objectives" of its economic policy. The Kingdom of Lesotho, situated in Southern Africa viewed employment creation as an urgent matter (Baffoe 1983:18) and called for "... considerably increased domestic employment with greater emphasis on labour-intensive techniques", '*inter-alia*' in its Third Five year Plan, 1980-1985 (Mastern and Russel, Autumn, 1985: 70).

The concern over unemployment problem is also common to "all western industrial societies [where] there is [also] widespread and growing concern over the prospects for employment". In Britain, unemployment level for example doubled to 3.1 million between 1979 and 1984 (Your Business, June, 1985: 13). Recent reports however indicate that the trend is declining to below 3 million mark. This problem has partially resulted from the

natural population growth (though it has now stabilised and is on the decline) leading to an influx of young people in the labour market. In these countries, the unemployment problem is also faced with short, medium and long term constraints. The short term problems are a result of economic recession which is reducing job-opportunities. The medium to long term include the technological changes, which have been taking place in western societies, in the processes and products (especially those arising from the microprocessor developments), energy deficiencies, and increased competition from newly industrialised nations (Lloyd and Dickens, 1979: 1).

Unlike in Zambia (MCDP, July, 1987: iii), in western societies, attention is now being drawn away from concern over inflation and being focused on the creation of more employment opportunities (Stewart, 1978,:4). The small business sector and in particular the new small firms have been increasingly receiving more attention in such countries as the U.S.A. and Britain.

1.3 STATEMENT OF THE SPECIFIC PROBLEM AREA: SIGNIFICANCE OF THE ROLE OF THE SMALL FIRM SECTOR IN ENTREPRENEURIAL FORMATION AND JOB CREATION.

When dealing with support for small businesses, three major policy issues can be identified. Attempt need to be made to provide solutions in order for such policies to be effective. The first issue means determining the significance of the role played by small firms and whether it deserves special attention. The second requires identification of the kinds of small

businesses within the small firm sector which deserve most attention. The third involves finding out the types of people who form the successful small businesses.

1.5.1 THE SIGNIFICANCE OF THE ROLE OF SMALL FIRMS IN EMPLOYMENT CREATION

The small business sector and in particular the new small firms have been increasingly receiving more attention as a primary source of new jobs. This has been reinforced by findings reported by Birch, suggesting that in the USA as a whole, small firms (those employing 20 or fewer workers) generated 66% of all new jobs (Birch, 1979; Peirce, 1981:30-31). Surprised by Birch's findings, Colin Gallagher of Newcastle university's department of industrial management, attempted the only available comparative investigation in the U.K. His findings that over 50% of all new jobs created between 1971 and 1981 were in firms employing less than 100 (31% of these being created in firms employing under 20 people) echoed Birch's findings (Your Business, June, 1985: 14).

The Small Business Administration, SBA (1984: 1) has also recently reported that the small business sector (firms with fewer than 100 employees) created most of the new net jobs from 1980 to 1983. When discussing the value of small business as an economic development tool, Rostow (1960 cited by Masters and Russell, Aut., 1985: 68) noted that small and medium-sized industry created most of a nation's new jobs during periods of rapid growth. Your Business (June, 1985:14) also reports that 87% of medium sized firms with between 20 and 100 employees category increased an average of 17% of labour force over a one year

period in 1985. This compared unfavourably with increases of 10.5% and 8.8% in labour force for the 100-200 and more than 200 group categories respectively.

Petrof (1980:52) has indicated that the positive contribution of small business can be realised if: potential sellers and buyers are co-ordinated; relevant market information disseminated; resources are efficiently utilised; export and domestic demand stimulated; and small firms are dispersed through out a country. Dawson (1982: 18) has suggested that as developing countries lack the markets needed to support mass-production, do not possess sophisticated technology and infrastructure, small business may be the appropriate production and distribution vehicle.

Encouraged by these favourable views towards the small scale business sector, Zambia has promoted small-scale business development. The planners of the Third National Development Plan (TNDP), decided

> to consider generation of more and fuller employment as a major objective of development, and to that end, to adopt technology which is labour-intensive

as one of the major eleven objectives. The small business sector has been specifically identified as one of the major tools to combat the unemployment predicament, especially among the young (NCDP, 1979: 22 & 412).

1.5.2 THE NEED TO IDENTIFY DECREASING SMALL BUSINESSES

Critics of policies that emphasize special favours for small firms have pointed out that the proposition that "small firms constitute a vast, untapped potential for new job creation" is highly questionable (Cannon, 1982: 8). These writers suggest that this approach exaggerates the capability of small firms to respond especially in the short term.

It is argued that it is a misconception also to suggest that all small firms generate new jobs. The truth (at least in the case of USA) is that only " a fraction of small firms creates all new jobs" that are created by small firms (between 12% and 15% of small firms) (SBA, 1983: 87). Gallagher (Your Business, June 1985: 14) has also found that: "No one size of firm is responsible for the majority of job creation in the U.K.- rather all size sectors make a significant contribution". Fothergill and Gudgin (1979) have in fact challenged Birch's findings arguing that 58% of the 66% new jobs total were generated in the service sector and only 8% were in the manufacturing sector. In Britain, Cannon (1982:8) has argued that the reality is that although small firms appear to be

> the only significant sources of new jobs while the overall economic contraction takes place, the extent of this is limited and certainly falls short of replacing net job losses from large firms.

Lloyd and Dickens (1979: 8-13) also arrived at similar depressing results in a small business field survey as

> the forces for job degeneration far exceeded... for replacing employment opportunities.

They indicate to policy makers the need to be more cautious in describing the ability of small firms before making

generalisations especially if such ideas are to be embodied in a policy without first being subjected to thorough analysis. Johnson (1978) has also compared the attention and support being

> given to small firms [to] that lavished on large scale operations in the late 1960s

Boswell Jonathan (1973; Bannock, 1978: 7) has described the small business sector's elusive net benefits as a double edged sword. This is because its value as a source of vitality and renewal can be matched by inefficiency and decay. Some critics have therefore questioned the wisdom of supporting small firms through public funds. They argue that small firms jobs do not last (SBA, 1983: 70). Funds should therefore be spent if at all on large firms. The SBA found that firms with size of 1-9 employees, had a 75% chance of surviving one year after formation while that of a larger new firm with 20 or more employees was about 95% i.e. 20% greater probability of lasting one year.

In Britain, Gallagher's (Your Business, June 1985: 14) findings for the 1971-81 period showed that "over 50% of the smaller firms in the 1-19 employees bracket had died by 1981 and of the survivors, almost 80% were still in the same size". In reality, this size category's share in employment increase was only "from 13% to 15%" in the ten year period. Since the publication of the Bolton Report in 1971, successive governments, have tried to promote "a health competitive economy". This is seen as one in which the small firm will find favourable conditions; "appropriate to its establishment and growth" (Lloyd and Dickens, 1979:1). But no special attention has been given to the sector.

Critics of the policy of providing special attention to small firms, often refer to the fact that the Bolton committee rejected the need to give special attention to small firms. It was argued that the decline of the small firm sector occurred because of "monopolistic elements" in the economy which threatened the continued performance of the 'seed bed' function (1971: 58). But the trend was not too serious to call for any special action. The committee was of the view that the small business sector remained competitive enough to (1971: 84)

> "provide the small firm with the necessary incentives and rewards to fulfil [its]... functions"

The Committee (1971: 87-88) was not inclined to recommend discriminatory measures in favour of small firms because it feared that this could lead to inefficiency and such interference was found undecessary at that time. This was especially so since that "would be both extremely controversial and costly", particularly as the decline had not reached such a critical stage to deserve discrimination.

This controversy on the extent of unjustified government support to small firm development from the initial stages, at public expense, is not only debated in developed countries, but also in developing countries by academics and policy makers. But like those in the west, they are also divided on the issue. At a seminar on government's role in the very small firms (those in the informal sector) in Kenya in 1974, one view called for urgent government action to "rationalise the sector" as no hope of progress was envisaged without rationalisation, or that the sector's "dynamism could be harnessed and used more productively". However, the opposite view advocated for a

minimal involvement either because the resources would be wasted on it or because government intervention would lead to rules and regulations that would stifle the initiative of small-scale entrepreneurs" (Emmerij, 1974: 204).

1.5.3 IDENTIFICATION OF TYPES OF PEOPLE WHO FORM BUSINESSES

The issue of whether to support small business and if so which, is wide ranging. It is linked with debates on entrepreneurial personality as a way of identifying and differentiating successful entrepreneurs from failures or from other managers in larger firms or from other members of a society. At present, four models have been proffered to explain successful entrepreneurship. The earliest was the trait approach. This refers to the notion that a cluster of special entrepreneur characteristics (McClelland, 1961, 1965, 1969: Brockhouse, 1980, 1982) can be identified. The second approach was the psycho-dynamic model. This emphasized early family experiences of "endured hardships" (Kets de Vries 1977:45-50). The third explanation is the social development model, stressing social influences in the stages of an individual's development as being instrumental in deciding to enter self-employment (Gibb and Ritchie, 1981).

This model, identified four stages and associated these with the types of entrepreneurs who may enter at any one of these stages. Using this approach to entrepreneurial formation, Ettinger and Fremont (Spring, 1985:55) distinguished between organisation makers (start large organisations) and solitary entrepreneurs (sole proprietors). They urged those concerned with

achieving full employment through small firm formation to seriously consider supporting the former to avoid wasting resources just as other researchers (Storey, 1983; Mason, 1984/85:44) have also stated. They also observed that

> ... all studies take into consideration the environment of creation and entrepreneur's personality.

The typology approach was initially used by Hornady and Bunker (1970) when they distinguished between craftsman and opportunistic types of entrepreneurs. The latter are similar to the organisation makers typology of Ettinger and Fremont. The experience of Korea is useful in explaining this. It shows that first time entrepreneurs go it alone. Most fail, but those who succeed are provided with substantial financial support (Jones and Sakong, 1980:182). Elsewhere studies have confirmed the initial high rate failure of small firms (Mason, 1984-85:34).

Besides the typology approach to understanding entrepreneurship, studies have advocated an understanding for reasons why people start small businesses. The theories presented vary widely with such concepts as the search for autonomy, economic displacement, personal credibility . and social marginality being put forward. These are fully discussed in technical appendix 2A which deals with entrepreneurship.

Chell has brought together much of the evidence on small business formation and entrepreneurial concepts into four models, three of them already already indicated above. She has advocated a composite environmental-situational personal model (see technical appendix 2A for details).

1.5.4. CONCLUSION

In the light of the above discussion, it appears that the controversy of job creation has not yet been resolved. It therefore seems prudent that Zambia should attempt to find some answers to this policy issue before implementation of any major decisions and investing major resources in this scheme. In the past, schemes such as co-operative movement (Dodge, 1977: 83) and the abortive attempt to transfer some foreign owned retail shops (Mushota and Mulwila, Nov., 1981: 19) have failed because of lack of careful study or/and planning before hand.

In addition to the general problems of unemployment and alleged capabilities of the small scale sector in creating jobs, Zambia's problems are further compounded by lack of information on entrepreneurial formation rates, the likely numbers of jobs that the small firm has been creating and can be expected to generate in the future and in particular in the manufacturing sector. This will therefore be a specific problem that this research will be concerned with.

1.6 STATEMENT OF THE SPECIFIC PROBLEM FOR THIS STUDY: ENTREPRENEURIAL FORMATION AND JOB CREATION IN THE SMALL FIRM MANUFACTURING SECTOR

The big question to be resolved is who will start businesses within the environment described. In order for the Zambian Government or its agencies to effectively implement the new policy of fostering and encouraging the formation of new firms and supporting existing ones, identification of who these are, where they are located, their problems and knowledge relating to firm formation rates are prerequisites. The expected results or benefits should also be known.

A number of issues which need investigation have been identified. For the scope of study, resource factors and time constraints the research therefore concerned itself with five main issues:

1. Job Creation by Small Firms The first concern was whether small manufacturing firms can create more jobs than large firms in Zambia. The period of investigation covered firms formed since 1965. The findings will help policy makers understand the capacity of small firms to create employment.

2. Characteristics of small Zambian Businessmen The second issue was an examination of people who form small businesses in Zambia. This included studying the characteristics of small Zambian businessmen. This was not done directly, but through extrapolation from evidence of other studies and experiences of other countries. There is a need to find answers to such questions, *'inter alia'* as: Do entrepreneurial characteristics (such as family background) and entrepreneur's own working

experience, personal attributes (ambition, interest, motivation) and education play a critical role in the formation of an entrepreneur? Such results will be helpful in determining whether a significant number of school dropouts can find self-employment in the small firm sector. Zambia's unemployment problem is greatest among the youth. This group needs immediate help in the provision of employment.

Two parallel studies of students and graduates respectively of the Copperbelt University's (formerly University of Zambia's) School of Business and Industrial Studies were also undertaken. The findings may be the initial step in predicting who are likely to start small businesses and which are likely to be successful so that efforts will be concentrated on them. SBIS students and graduates were selected because they had adequate and relevant educational background. But it was thought that they would not like to start businesses because Students at the Copperbelt University appeared to exhibit marxist behaviour and views.

In the past, the University had experienced several disturbances partly influenced by such beliefs. When the Soviet leader president Breshnev died, in November, 1982, for example, students declared a day of mourning and cancelled all the lectures by boycotting classes (CBU, Nov., 1982, Principal's memorandum - see chapter 1 appendix 3 (1A3)). In February, 1985, they decided not to attend classes when a University colleague died at the then main campus in Lusaka (CBU, February, 1985). Refer to chapter 1 appendix 4 (1A4). In their magazine, they also preached against amassing wealth by petty bourgeois at the expense of peasants.

On the occasion of the death of President Brezhnev, Professor Mubanga Kashoki, then Principal, now the Vice-Chancellor of the constituent Copperbelt University, wrote to the student body because of his (see full text in the appendix):

> ... increasing concern at the creeping tendency on the part of the student body, either in the name of UNZASU, or that of student welfare, to usurp the authority of the University Council, the University Senate or the University Administration. The latest manifestation of this creeping tendency is the unilateral decision taken by the student body at this campus on 12th November, 1982 that there would be no attendance of classes in memory of and out of respect for the death of President Leonid Brezhnev.
>
> There is not doubt in anybody's mind that a great man has died. There is also no doubt that the great man ... was a distinguished latter-day architect and pillar of Marxism-Leninism. There can be no doubt, too, that the entire international community recognised the late President Brezhnev as an outstanding statesman and a world figure of rare distinction and incomparable stature. President Brezhnev, it is universally acknowledged, had contributed in his life-time in no small measure to the construction of our universe as we know it today. Because of all [these] there can be no doubt and no debate that he deserves honour, recognition and special last respects following his death.
>
> However, to recognize and acknowledge of this great man ... is NOT a sufficient cause nor a sufficient condition for students at this campus to disregard the authority ... and take the law in their own hands....
>
> It may be that you looked upon your decision not to attend classes ... as an admirable act of student dynamic activism and as a way of symbolizing and demonstrating solidarity with the socialist revolution, but, I am afraid, I find in your action a demonstration and manifestation of immaturity, irresponsibility and misdirected dynamism...

From such actions and pronouncements, it could be assumed that some students at the Copperbelt University, would not like to pursue business ownership as a career since that would lead to accumulation of wealth. In addition, it could also be assumed that the type of training they received, which emphasised occupying top managerial positions could influence others to detest business ownership or working in small businesses.

In addition, to studying potential entrepreneurs' attitudes, attention was focused on the effect of environmental and situational factors on business start ups. It was thought this would help in finding out the phenomena which underlie entrepreneur formation in Zambia. This sought to cast some light on the relevance of the psychodynamic, social development, trait models or Chell's composite model.

3. Role of Government through SIDO The third issue examined was the role SIDO and its programmes in encouraging the formation of small businesses. This is important because in the current poor, economic situation, an increase in new businesses will not occur without an appropriate environment and incentives programmes even if small firms can produce more employment and a significant proportion of school dropouts form small businesses. The number of firms that will be formed will depend on the appropriateness of the programmes and incentives that the government can offer. This is especially true in developing countries of Africa. Here both human and physical resources are scarce and the economies are characterised by state control.

4. Role of Small business supporting Agencies The fourth controversy investigated in a fourth parallel study was the role played by small business supporting agencies. These were the financial institutions, private agencies and district councils. This was found important because most often the environment provided by these organisations is critical in small firm generation process.

5. Developing small firm definition The fourth problem dealt with was developing a better definition for use in this research

project and in Zambia. It was thought this would be of value to SIDO and the Zambian government. The initial search for an appropriate definition for use in this study indicated that there was presently no suitable definition.

1.7 SCOPE OF THE STUDY

The study focused on the analysis of formation of entrepreneurs and the performance of the small manufacturing sector in two of the three urban provinces of Zambia from 1965 to 1985 (i.e. 20 years). These provinces were the Copperbelt[4] (Ndola, and Kitwe towns were covered) and Lusaka (the capital city). The study of enterprise formation involved examination of the underlying entrepreneurial model as described above. Performance was studied through examination of rates of firm formations, rates of job generation, and total fixed assets per job created. The attitudes of potential (students and graduates) and existing entrepreneurs towards small business formation and government's small firm policy was investigated. In addition, the performance of SIDO in encouraging firm formation and provision of assistance was scrutinised. By implication, this meant that a group of large firms was also studied for comparative purposes. These measures may be deficient in that small businesses may be established for a variety of objectives and motives. These have been extensively documented elsewhere in many studies (Storey, 1982: 111-112); (Golby and Johns, 1971: 5; Curran, 1978: 189-190). In doing so, attention should nevertheless not be distracted from the main purpose: to find out whether small firms can create more employment than large firms (as the government seems to believe) regardless of the intentions of their founders.

At this point of the discussion, readers may nevertheless question why one sector (manufacturing) and the period of 20 years were selected.

This approach may be criticised on several grounds. First, it could be argued that in Zambia, there is no prior evidence showing that one sector, for example manufacturing, makes a great contribution than other sectors[5] in the small business. Second, other researchers have suggested that concentration on manufacturing sector is dangerous. The assumption that its contribution in terms of employment, innovation, flexibility and dynamism is superior to other sectors, may be a mistake as related investigations have not identified such advantages (Leyshon, 1982: 80).

Third, other readers may raise the issue that if this is the first integrated study of the small firm in the formal sector, then tremendous benefits could be gained by examining the performance of all sectors. Fourth, a broad study could reveal areas requiring future research.

These comments may have merit. The authors have their own sources of information. The decision to choose one sector was made for two reasons. The first were the financial, time and human resource constraints under which the researcher operated. The second was the need to have comprehensive comparative data within a single sector instead of comparing across sectors (Curran, 1978: 58; Dewhurst, 1980: 5). They are lacking in most studies on small business. This is required in order to attain "rational debate about policies to change firm sizes" (Miller, 1980: 30), to attain an accurate picture of job creation and for

effective utilisation of performance measures (Dewhurst, 1980: 5). These are important because differences between industries can have a great effect on findings (Curran, 1978: 58).

Manufacturing was selected by the researcher for seven reasons, several arising from the increasing importance being accorded to this sector by the Zambian Government. These were that manufacturing:

1) is the basic creator of wealth;
2) has multiplier effects;
3) is a vase with untapped promising opportunities;
4) is a useful tool for diversification of the economy;
5) can be a user of more local materials;
6) is a potential major foreign exchange earner; and
7) was determined by the researcher to be easier for investigating the effects of government's policy since it (government) selected it to be the target for implementing small business scale policy.

These are now picked up for brief discussion.

1) <u>Basic creator of wealth</u>

Evidence in Zambia and elsewhere show that the manufacturing sector is still viewed as the economic activity upon which the rest of an economy depends for the creation of wealth, at least in the formal sector in (Cross, 1983: 111). In addition, it directly contributes to the creation of employment. This is also true even in the small scale and informal sector. In the case of Zambia, Haans (July, 1982:3-4) observed that the apparent concentration on the manufacturing and service activities rather than on the trading sector in the informal sector is due to

limited "potential for employment creation" in the later which is manifested by easy entry. Writing on the effect of trade policies on the informal sector activities in Zambia, Olsson (Sept., 1981: 8) said, "these [manufacturing] activities are perhaps the most significant from the point of view of employment promotion and income generation". In addition, in editorial notes to the African Social Research (June, 1982:V), a Zambian publication, the manufacturing sector was said to have been

> identified, although currently not enjoying much significance in the Zambian economy, as having the greatest potential for growth and employment generation.

2) Greater multiplier effects

Cross again points out that there is a greater multiplier effect on jobs and activity than in the service sector. This is so because increased incomes in manufacturing lead to more (consumer) services. The argument is that increased jobs in the later without a rise in the wealth of a nation (manufacturing and agriculture) will lead to displacements and eventually to reduced jobs in almost all sectors.

3) A mass with untapped abundant opportunities

Zambia has a great potential to establish a strong base in manufacturing, capable of creating wealth and achieve multiplier effects. Natural and mineral resources offer untapped opportunities for the manufacturing and agricultural sectors. But there has been a failure to effectively respond to "the call to exploit" the full potential of the country's "natural resources" (NCDP,1979: 21 & iv). Indeed, 80% of Zambia's farm land lie unused (Economist, Oct., 19, 1985: 79). Manjappa, UN-Senior Advisor (1981: III), has also observed

> Zambia is a country of great promise, which offers unlimited potential for industrial development. Nature has bestowed upon this country all those resources, human as well as material, which go to make a nation a great industrial giant.

Evidence elsewhere indicate that countries such as America developed industrially because of "the vastness of its natural resources and it might be added, scarce population" (Colins et al, 1984: 15). Zambia is bestowed with plenty of land (three times that of U.K.) with a population of only 7.2 million, i.e one tenth of the U.K. Despite this Zambians are eking out a meagre existence amid natural resources which are technologically meaningless to them and yet are comparable to the resources of North America before its development

Sectors such as mining and insurance are not attractive to small businessmen since they are controlled by the state as a result of the second and third economic reforms of 1968 and 1970 respectively (see chapter 3.5). The other reason is that large investments are also required in the mining sector. There are therefore only a couple of small mining and quarrying firms which have been tolerated, as private businesses, by the government. Studying these sectors would therefore not be worthwhile.

4) <u>Diversification</u>

A policy of diversification to tap promising opportunities, has received increasing attention recently. The manufacturing sector, is expected to have "a key role to play" (NCDP, 1979: 22 and 239), in the future. Along with agricultural sector it is seen as central to the diversification of Zambia's ailing economy from too much dependence on the mining industry, particularly copper.

5) Use of local raw materials

One of the Third National Development Plan's (TNDP) ten major objectives (NCDP, 1979:22) was promoting

> industrial production based on local raw materials, to satisfy domestic demand and generate exportable surpluses.

The great underutilised potential of the manufacturing sector makes it vital to a programme to substitute foreign raw materials with those which are available notably the small firm sector (NCDP, 1979: 248-250).

The strategy for the manufacturing sector is aimed specially at creating "larger employment opportunities for the local labour force". This is expected to increase direct and spin off employment since special preference would be given to labour intensive machinery and equipment. In this aspect, a high priority had been "assigned in the manufacturing sector to :

(i) agro-industries processing local agricultural produce and supplying inputs to agriculture.

(ii) industries making maximum use of domestic raw materials and intermediate goods; and

(iii) Small-scale industries "

Two points should be noted. First, that the government attaches "highest priority to ... the multiplication of small productive enterprises... [in the] development of small scale and rural industries". Second, that these productive units include "agro-industries, food-processing industries as well as industries for the manufacture of simple agricultural implements and machine tools" (NCDP, 1979: 29, 58-59). The apparent emphasis on the small manufacturing sector is clear.

6) Potential major foreign exchange earner

The government believes that accomplishment of these objectives would facilitate the achievement of the target of turning the manufacturing sector into an alternative major source of foreign exchange. The President of Zambia, Dr. Kenneth Kaunda, emphasised the importance of exporting compared to consuming organisations, when warning all organisations, especially those depending on imports to "export or perish" (Times of Zambia, 1984). The TNDP (NCDP, 1979: 252) also states

> The Industrial Development Act, 1977, provides a potent tool to direct investment into the priority industries and to promote rural small scale industries, [and] export-oriented industries ...

7) Target for SIDO's small scale policy

Current government and SIDO's small-scale policies, appear to favour the manufacturing sector rather than the service or other sectors. SIDO (SIDO, 1983(a): 4) states:

> small-scale sector is a free sector, where Zambians are invited to set up their own Private and Co-operative Units in manufacturing activities

The SIDO Act of 1981 section 2 however refers to small scale and village enterprises as undertakings "... engaged in manufacture or in the provision of services". Recently, 1985, SIDO's Director, Dr. Ng'andwee (1982:143) has confirmed this emphasis on the manufacturing sector when he said, "Our basic focus is on manufacturing activities...".

Therefore since this research was concerned with the studying of government stimulatory policies, it was more logical and sensible to concentrate on this sector.

In the light of the overwhelming evidence, as discussed above, it is clear that the manufacturing (and agricultural sectors) provide great potential benefits. It is therefore not surprising that they are increasingly becoming more prominent in the Zambian economy. Therefore since the interest in this research project was studying government stimulatory policies, concentrating efforts on the manufacturing sector was the most logical, sensible, feasible, beneficial and challenging alternative. Constant reference was however made to small businesses in Zambia, in general, where appropriate.

FOOT NOTES:

[1] Formal sector in this study refers to business organisations that are registered with the Registrar of Companies.

[2] The public sector is composed of two main categories: boards and corporations set up by parliamentary statute, wholly owned by the government operating mainly in agriculture and transport sectors referred to above as public organisations; and parastatal organisations formed under the Companies Act and controlled by the government (NCDP, 1978: 415). The Economic Review and Annual Plan 1988 (NCDP, 1988: 228) however refers to parastatal organisations to include "boards and Corporations set up through parliamentary statutes and wholly owned by the government and companies established under the Companies Act in which the Party and Government have secured controlling shares"

[3] The 1988 Economic Review and Annual Plan defined labour force in Zambia as "that part of the population above the age of fifteen, who are either employed or unemployed but available for work". It does not include the disabled, full-time students in formal education or training institutions, children under age etc... including full-time housewives.

[4] Copperbelt refers to the seven towns along the old line of rail covering : Ndola, Luanshya, Kitwe, Mufulira, Kalulushi, Chingola and Chililabombwe.

[5] The other sectors are agriculture, forestry and fisheries; mining and quarrying; construction; retail distribution and wholesaling; road transport; motor trades (garages etc.); hotels, restaurants and catering etc.; business services and miscellaneous such as hairdressing, boot and shoe repairing, maintenance and repairs etc., using Standard International Classifications (SIC).

CHAPTER 2: PRIOR RESEARCH AND NEED FOR INVESTIGATION

2.1. INTRODUCTION

This chapter presents prior research done in the area of job generation in small business in developed countries, and relate it to Zambia in order to discover a niche on which this research concentrated. Detailed references of other work done in the area of small business will not be given as that has already been done at several junctures (see chapter 1 appendices 1A1 and 1A2 on the definition of small firms). It is also presented in chapter 2 appendix 2 (2A) for entrepreneurship theories and chapter 4 for roles of small businesses). Therefore only some references will be made for developed and developing countries in order to identify some gaps requiring investigation.

2.2 PRIOR RESEARCH IN DEVELOPED COUNTRIES AND THE THEORY OF ENTREPRENEURSHIP

Prior to the 1970's, little had been written on small firms even in developed countries as there had been little interest. This was partly due to the secrecy surrounding the operation of private small businesses and pessimistic attitudes regarding the importance of small firms. Most people believed that small firms had little if any to offer to a nation's development.

In Britain the first reference to a small firm dates back to 1931, when the Macmillan Committee Report on Finance and Industry (1931:173-174) acknowledged the lack of long-term capital for and the subsequent great difficulty that was

> experienced by the smaller and medium sized businesses in raising the capital ... even where the security offered is perfectly sound.

It was not until 40 years later, especially after the publication of the Bolton Report in 1971, that the small firm sector received much attention. The report showed that small businesses has a significant role to play in Britain's economy. It recommended, *inter alia*, the creation of information signposts throughout the country, and the creation of a department for small businesses, led by a Junior Minister, within the Ministry of Trade and Industry. It was, however, felt that financing small firms through direct grants and provision of consultancy in discrimination against large firms at public expense was not proper at that time. Hence such areas were recommended to be left in the hands of financial institutions, and private and voluntary organisations.

The experience of the US in small business support has however been longer. The small business Act of 1953, which established the SBA was a culmination of a long history of legislation, sympathetic to independent businessmen, beginning with the Sherman Anti-trust Act of 1890 (Beesley and Wilson, 1985:113). Specific legislation on small business goes back as far as 1913 when a bill to "stimulate and encourage small business enterprise" was introduced. There was however little academic interest even in the US until the 1960 and particularly the 1970s.

Since then there has been a proliferation of literature in the field of small business, especially the last fifteen years.

Early research concentrated on the structure of the small business sector. Some studies have showed how economies of scale affect the size of small business (Steindl, 1945: 1 & 13). Others

related structure with size and the rate of rise and decline of small firms (Boswell 1973:118-122; Prais, 1981:5-11). Boswell showed in the case of Britain how growing family firms are prone to decline when faced with largely adverse trends. Prais also showed how British small firms declined continuously and sharply from 93,000 establishments for firms having ten employees or less, to 35,000 establishments from 1930 to 1968. Phillips (1951:5,42 & 69) also showed in the case of US. how small family firms with few employees (45% with non paid employees and 82% with less than four in 1939) had declined, being replaced by large firms. Curran and Stanworth (1982) discussed the past, present and future role of small firms.

In another branch of study, sociologists had concentrated on differentiating the small business, not by structure but by finding a relationship between the firm and analysing the owner (Schumacher, 1973:225). Other studies were however hybrids, such as the one by Kaplan (1948) which identified small business with dominance by owner and management. Hollander (1967:47) focused on centralisation and concentration of managerial task on the owner as the characteristic. Still other studies identified a small business owner as having special attributes referred to as entrepreneurial characteristics, differentiating him from other managers or people (Smith, 1967; Colins et. al., 1964). But Drucker emphasised small structure and size of top management as the distinguishing feature of a small firm.

Starting from the 1960s, studies tended to move away from the general notion of characteristics to more specific investigations on the personal attributes of an entrepreneur as a way of identifying him. The first of these approaches was the

trait model, introduced by McClelland (1961, 1965, 1969). It was later supported by Brockhouse (1980, 1982) aimed at identifying a cluster of traits of the entrepreneur himself (and not structure or size of business) to explain what makes up an entrepreneur. A different approach to traits was the psychodynamic model of Kets de Vries (1977:45-50). It related the decision to become an entrepreneur as being greatly influenced by early family background experiences of "endured hardships", lack of self esteem and confidence, feeling of insecurity and rejection. Gibb and Ritchie (1981) have developed a social development model, emphasising the importance of different social influences at significant points in an individual's life cycle which influenced him to start a business. A recent approach to this expanded entrepreneurial personality is the environmental-situational-personal model which Chell (Spring, 1985:43) has proposed as being more explanatory to entrepreneurial formation. In fact she has argued that the wealth of research investigations on entrepreneurial personality can be condensed into the above four models of her classification (see chapter 2 appendix 2A.5 for details and controversies surrounding these theories). Some studies dealing with reasons and motives for going into entrepreneurship which vary (Shapero, Boswell, 1973; Bechhofer and Elliot, 1976; Soase and Goffee, 1980; Stanworth and Curran, 1973, 1976) can be included in the social development model.

The aim of these models was to identify an entrepreneur in order for decision makers to focus their efforts on such types of people to increase their numbers. Unfortunately, up to date, no definite conclusions have been found (Chell, Spring, 1985:43; Deeks, 1976) although studies on this aspect proliferate.

It is evident from above that studies on the capacity of small firms to create jobs compared to large firms is a new phenomenon (Malmiton, 1981; Johnson, and Cathcart, 1979(a); Storey, 1982; 1980(a), 1980(b), 1981; Forthergill, and Gudgin, 1979; O'Farrell, Winter, 1984; Birch, 1979). As it was pointed out earlier in problem definition, the role of small firms in creation of employment is still a debatable issue.

Since the 1980s there has been a new approach to the study of small firm stimulatory policies especially where the objective is to provide full employment (as in Zambia's case). These studies urge such countries to be prepared for significant resource investment (Meredith, 1984:14). Meredith, for example advocate for the inclusion of other target audiences and provide them with management education and training to increase the small business population of high fliers (see chapter 2 appendix 2A.6 for details).

The advocates for this approach are world-wide, for Britain these include (Kirby, 1984:28-34; Ball and Gilligan, 1985:83-84); for Australia (Meredith, 1984:14); for Europe (Watkins, 1983:41-43); and for US (Solomon and Carney, 1985:30). Chee (1985: 18-21) advocated concentration on using formal educational system in the case of Malasia as management training proved to be too expensive (see chapter 2 appendix 2A.6 for a detailed discussion).

Other advocates have endorsed offering management and education training programmes to university and college graduates, to help them change their negative attitudes cultivated by traditional educational systems, towards self-employment or salaried employment in the small business as career

alternatives. Their argument is that the traditional system results in a very small per centage of graduates leaving educational institutions armed with adequate skills ready to start their businesses (Meredith, 1984:12-16: Ettinger and Fremont, 1985:57: Watkins, 1983:29-30; Cannon, 1985: unpaged). Some educational institutions, have responded to such appeals (Ball and Gilligan, 1985:62-65; Hale, 1984;1-4; Menadio and Hale, 1986:2-4). Refer to chapter 2 appendix 2A.6 for details.

2.3. PREVIOUS RESEARCH IN ZAMBIA

There has been shortage of relevant literature on small businesses in most developing countries (Meck, 1983:251 & 254; Besong, 1978:13-14). The few studies that have been conducted for example on Africa are so general that they serve little if any purpose. One such study edited by Storey (Meck, 1983:258), which discussed small scale in relation to developing countries covered five countries in South East Asia in a chapter of 30 pages and the entire African Continent consisting of 50 countries in another 20 paged chapter. Zambia was for example mentioned only once when listed as one of the countries that have taken the first steps in orderly development of the small enterprise sector in the entire chapter. Other countries in Africa were not even mentioned. It is therefore doubtful whether justice can be done by studies such as this one in making any concrete conclusions for policy formulations since there are "differences in development" (Emmerij, 1974:204), in addition to social and political systems, geographical variations and other problems.

In Zambia, first, there has never been any serious, in depth, extensive, theoretical or empirical official or academic study of the small business sector similar to the Bolton Report. Very recently, Dhall, in his paper contributing to United Nations Development Programme (UNDP) technical papers, referred to a 1984 World Bank report which noted that available data on the SSI sector are very weak. He states, "It is therefore difficult to have accurate statistics on the size of the sector" (Dhall, 1987: 73). He continues (p.76):

> No separate survey [from the one on informal sector] has been conducted on the formal small scale industries which may yield information on their number, characteristics, ownership pattern, etc. The census of Industrial production does not separately categorise small scale units. It contains a wide mixture of sizes ranging from 23 to 301 employees.

NORAD (1986:17 & 113) also concurs:

> the only comprehensive statistical survey of the rural small enterprise sector in Zambia is the US-AID assisted Rural Development Studies Bureau survey published in September, 1985.

NORAD admits making its aid proposals on:

> assumptions [because of] lack of basic research into the economic situation of SSEs and their economic needs, [which] makes it very difficult to assess the impact of the assistance programme at this stage

Second, there is no known study on entrepreneurial small business formation by school leavers and graduates in the small formal sector. Third, there has been no comparative study of small and large firms in their capacity to create employment. Fourth, there has not been any investigation on the new government's small business policy, that created SIDO. Neither has SIDO's performance in promoting small business generation been examined. Dhall, (1987:91) repeated recommendations by World Bank (Zambia, August 1984) and UNIDO (Republic of Zambia,

May 1981) by calling for:

> a comprehensive survey of the entire SSI sector.... This should yield, among other things, baseline data to measure further progress in this sector.

Of the few studies that have been carried out, almost all of them have concentrated on the informal sector. Beveridge and Oberhall (1979) however carried out a study entitled 'African businessmen and development in Zambia'. But it concentrated on description of business process and characteristics, without relating these factors to entrepreneurial formation or employment creation. The study was more concerned with the rapid growth of the indigenous African business sector in Zambia after independence compared to before. Since the study was carried out before the new government policy was implemented, it did not address itself to the issues raised above.

One group of studies in the informal sector has concentrated on a wide range of employment opportunities available in the informal sector. There have also been some studies on a formal (labour policy issues), and voluntary and government youth training programmes (Hoppers et. al., 1983:27 & 101; Kanya, 1983:51-61; Aryee, 1981:5-11). Other areas that have received attention from researchers have been the structure of manufacturing industry and its implications for the development of the informal sector (Haan Hans, 1982), trade policies and their impact on the informal sector (Olsson, 1981), the legal framework within which informal sector functions (Mulwila and Mushota, 1981), financial assistance to small scale industries in Zambia, and factors affecting efficiency in the informal sector (Kanya, 1981).

Another group of immaterial literature has recently been produced in a special issue of African Social Research on 'small-scale industry' containing eight contributions which came out of the press in 1985. As the Editors themselves admit these basically deal with the "prevailing national debate on the urban informal sector ... vision for the future ... " and case studies of selected number of firms. In one case, only five organisations were dealt with by Kanya and Bbenkele. Other contributors were: Turner, Ncube, Ng'andwe, Mulwila and Turner, Hoppers, Hansen and Hayward (Institute for African Studies, 1982:V). Very recently, one statistical survey of village industries has been reported to have been conducted by the Rural Development Studies Bureau (RDSB), University of Zambia in 1985. But the author warns readers in interpreting its statistics because they tend to inflate the picture of small scale industrial activity in the rural areas since (Dhall, 1987: 74):

> It included, apart from manufacturing, servicing and vending enterprises, as also single person, part-time, household type income generating activities...

Manufacturing for example included repairing activities, traditional beer brewing, forest based units like carpentry, pit sawing and basket making. Note that this study basically covered one rural area.

While the studies referred to above are useful contributions to knowledge on the "prevailing national debate", especially on the informal sector, they do not address themselves to the issues raised above. This statement is not meant to degrade them. Their value is acknowledged and appreciated. In fact reference has been made to them a great deal throughout the discussion. They are however inappropriate for the research as they were intended for

some other purposes. First, as indicated, almost all of them are in the informal sector. The present government policy is on the promotion of "modern industries i.e. units using modern equipment and techniques of production and management" (SIDO, 1983b:3). Traditional village industries fall "within the jurisdiction of the 'VILLAGE INDUSTRIES SERVICES- VIS' " (SIDO, 1983a:3). The studies conducted by Hoppers et al., (1983), Kanya (1983) and Aryee for example covered informal small businessmen from primary, secondary and tertiary sectors including

> ... tin-smithing, wood and copper carving, retailing, small-scale farming mostly at subsistence level ... (Kanya, 1983: 43).

The second reason why these studies are irrelevant is their inclusion of all the basic sectors. It will be recalled, from chapter 1.5 (which dealt with reasons why the manufacturing sector was selected), that studying across sectors is one of the major criticisms of most present small business studies. Part of Kanya's (1983:22) for example, examined static position of employment levels and vacancies in 33 formal companies in the primary, secondary and tertiary sectors. Apart from the smallness of the sample, it is doubtful whether any meaningful conclusions can be drawn from such a wide range of sectors with such a small sample size. In addition, this part of Kanya's study was mainly concerned with determining the opportunities available for school dropouts as employees not as entrepreneurs.

The third reason why these studies are immaterial, arising from the previous point, is that the studies which covered employment concentrate on analysis of employment as at a fixed point in time. This study is longitudinal in that it traced

job creation by the same cohort of firms over two or more periods. Even though these studies have analysed employment static data in the informal sector, none attempted to observe employment creation between two static points to provide any comparative static change. Worse still none of these studies attempted to find out job creation of individual firms by using dynamics data i.e. by following their births, deaths, expansions and contractions. Failure to do this gives misleading results since the two static points refers to net changes which ignores the different types of movements i.e. gross movements. These can only be obtained on a micro-data basis, i.e. observation of individual firms over time. Net changes two-static points approach is defective in the sense that businesses observed at the two points may not necessarily be the same (SBA, 1983:81-82). The problem arises because existing firms may change their size categories based upon the number of employees or capital, (as in the case of Zambia), as the firms lose or gain jobs or reduce or gain capital assets. They therefore change the size categories over a specified period of time. Therefore unless it is quite certain that the study is dealing with the same cohort of firms at the beginning and end, then some of the job changes may be more apparent than real.

The fourth reason for finding these studies inappropriate is that some of these studies are basically descriptive or prescriptive and therefore fail to provide a quantitative analysis and relationships among the various variables.

Fifth, none of them has therefore presented an integrated analysis of the small-scale manufacturing sector (informal or

formal) by looking at it as a separate identifiable but self containing unified entity. In these studies, various aspects of promoting the small manufacturing sector are discussed only in passing while studying other concepts or fields.

Consequently very little is known on the performance of the small manufacturing sector. In this particular case, Zambian government's formulation and implementation of small business stimulatory policies proceeded without a clear understanding of the roles of small firms. The possible effects of government's actions upon these small firms, or the likely outcomes in terms of numbers of small firms anticipated to be formed, numbers of jobs that would be created, types and numbers of innovations expected or total / net output. In Addition, the expected level of growth of the entire small business sector was not spelt out or at least known to some quantifiable extent to deserve such a special attention by the government.

Thus, there is neither theoretical nor empirical foundations which are necessary for making national decisions concerning the type of proper policies to be taken by the government. The national financial bases and alternatives to be taken by SIDO and financial institutions are also missing. There is also lack of national bases upon which to structure courses on small business by the School of Business and Industrial Studies (SBIS), although one such course was planned to be introduced in the 1986/87 academic year. When writing the chapter on trade, the TNDP planners admitted that the chapter had

> been greatly hampered by the lack of internal trade statistics. Such information is crucial to planning for the distribution of goods in the country. It will be necessary to set up adequate machinery to compile these statistics.

Therefore, there is a gap in the knowledge of the small business sector, and in particular how it performs. This knowledge is necessary in order for the government, U.N. Agencies, SIDO, SBIS, or any other interested party to be able to give any kind of assistance and to function properly.

This research does not claim that it is capable of providing answers to all the questions raised about small businesses. But it seeks to fill one of the gaps. This gap relates to performance of the manufacturing sector with respect to:

1) rates of firm formations;
2) creation of employment over time;
3) attitudes of SBIS graduates to small business formation;
4) adequacy of government fiscal and monetary policies to stimulate job creation;
5) roles played by small business supporting agencies.

Provision of such type of information, it is felt will go a long way in providing needed knowledge and closing the gap.

In addition, the research findings are likely to have some novelty or sufficient scope since little, if any, prior beliefs are held on the performance of small firms in Zambia. Therefore, the results could present surprises although the research will use developed countries' methodology.

2.4 NEED FOR INVESTIGATION

In the light of the above, it is clear that the need for investigation arises because first, the research topic appears to be reasonably symmetrical and second other groups will benefit from the results. The former point will now be discussed while the later is taken up in the next section.

The research is symmetrical because there is still controversy as to the degree of the importance of the small business sector and the role it can play in national development even in developed societies.

Bennet (1983:25-26) has observed that the economic importance of small firms has now generally been recognised at national, European Community and even at international levels. He continues to say that the European Economic Community has now described the small and medium undertakings as being "a corner-stone of the industrial and commercial structure of the community"

Bannock (1985:xii) has recently observed

> The vital role of small business in the newly industrialised countries of South East Asia and the continuing importance of small business in all the advanced countries, ought by now to have convinced every one that the role of small firms is as essential now in the second industrial revolution as it was in the first.

However, Storey (1982:42) has stated that the small firms' role and contribution to development is "more complex than many people have indicated". For example, on the claim that small firms provide the necessary competition to large firms for them to remain efficient and that they create a competitive atmosphere nearing perfect competition, his views are different. He argues that in Japan, where small firms are more, they are not viewed as competitors but as complementary units. He concludes that competition between small and large firms are neither necessary nor sufficient conditions for economic growth in a country. On the extent of generation of employment by the small scale firms, he explains (1982: 4 & 21):

> Whilst today's new firms will make a useful contribution to employment and wealth in the next two decades, the performance of the British economy will be determined by the ability of medium and large firms to be efficient and competitive. An emphasis upon small scale enterprises is no simple solution to reversing a century of industrial decline.

He concludes

> ... the contribution which small firms can make to job creation in future remains a matter of some dispute.

When commenting on U.K. small business sector annual percentage of rates of net employment change due to births, deaths, expansions and contraction, Bannock (1985:132) observed these

> ... were significantly lower than that of the US [and that] no one size of firm is responsible for the majority of job creation ... Rather, all size sectors make a significant contribution.

Yet the SBA (1983:70) found that 60% or more of industry and 60% of industry employment are found in firms with 500 employees (i.e. small firms). But their findings on survival rates appeared to support critics of public spending on small firms (rather than on large ones) since such jobs do not last. The SBA found that the probability of surviving for very small new firms, with 1-9 employees, was 75% while that of firms with employees of 20 or more was 95% between 1976 and 1977. Gallangher arrived at similar conclusions for Britain (Your Business, June, 1985: 14).

The disagreements also extend to methodology. The SBA (1983:87) has conceded that significant methodological problems such as 'top-down' and 'bottom-up' still exist even when using the same data (job creation were found to be 40% and 70% respectively) resulting in lack of reliability. The SBA therefore reported that it was

currently funding each of these major efforts in an attempt to determine the most accurate methodological approach to this subject.

On small firm definitions Ganguly (1985:5) has expressed this feeling of indefiniteness when he concluded:

> ... the search for a definition of a small firm is far from over [emphasis mine].

It is such kind of contradictions that led Curran and Stanworth (in Levick, 1984:127) to cap it all by affirming that although there has been a great increase in interest in the small business field in Britain since the early 1970's, which has been followed by an equally substantial increase in related research activities:

> The findings of this research have failed to make much impact.

They noted:

> Politicians and others continue repeating the same myths about small businesses ... for example on the job generation potential of new small businesses.

2.5 VALUE OF POSSIBLE RESULTS

The research will succeed or fail to the degree it can contribute convincingly to existing knowledge. The study would, however, appear to have potential value not only to various groups of the Zambian nation but also to others outside the country. It is therefore anticipated that the results would be beneficial to:

1) policy makers, in the Zambian government, who may use them to influence the development of national policies towards small firms;

2) the Small Industries Development Organisation (SIDO) in implementing government policy based upon thorough empirical investigations and findings instead of basing their decisions on inadequate information;

3) the small Zambian businessmen themselves through spin-off effects and possible changes in government policy towards them;

4) potential small businessmen who may want some information / knowledge about the small industry sector;

5) students and teachers of the small business area. For example, there are a couple of small business courses in the new programme offered for the first time by SBIS at CBU in the academic year 1986/87. But there are no relevant material or trained Zambian lecturers in this field yet;

6) researchers and international bodies such as I.L.O., U.N. agencies currently involved in small business research and the social aspects of youth unemployment etc.;

7) other foreign researchers in other countries who may want to know something about small firm development in Zambia. The research will also contribute to the search for a better definition of small businesses, which may be found very useful.

2.4 RESEARCH HYPOTHESES AND OBJECTIVES

With the detailed information provided on the problem definition, background, preliminary issues and definitional issues, a number of hypotheses and objectives of this research were therefore derived.

2.4 STATEMENT OF RESEARCH HYPOTHESES

The researcher's tasks were to prove whether or not the following hypotheses were true (for breakdown of these hypotheses to easily test them, refer to relevant chapters where results are discussed):

1) that the small manufacturing firms do not create significant job opportunities compared to large manufacturing firms. The jobs lost through contractions or closures are not replaced by those created by small firms;

2) that a significant proportion of school dropouts with educational level of grade VII and below will not find self-employment in the formal small manufacturing sector. Small business start-ups and success in the manufacturing sector is positively related to such factors as good education of at least grade IX (former form II), own working experience and access to financial resources;

3) that students and graduates from University of Zambia's School of Business and Industrial Studies, SBIS (potential small businessmen) have negative attitudes towards self-employment or wage paid employment in the small manufacturing sector. They prefer executive positions in large firms;

4) that the small business stimulatory policies are inadequate to encourage potential small businessmen to form more businesses;

5) that SIDO's programmes have concentrated more on assisting existing small businessmen than new start-ups.

2.4.2 STATEMENT OF RESEARCH OBJECTIVES

Several objectives were derived from the hypotheses in order to determine whether or not they were true. These were:

1) to analyse the performance of the small scale manufacturing sector in creation of employment. Specifically this required:

   a) finding out the rate of new firm formations;
   b) Ascertaining the employment creation rates by small compared to large firms.

2) to discover the types of people who form small businesses in Zambia:

   a) their family and personal characteristics;
   b) situations and reasons that led them to seek self-employment instead of salaried employment;
   c) stages in their life time when they decided to enter self-employment.

3) to find out attitudes of CBU students and graduates (potential entrepreneurs) towards selection into self-employment or salaried employment in the small manufacturing sector as career alternatives:

a) while at the University;

b) after leaving the University.

4) to discover students' graduates' views on the effectiveness of the SBIS degree programmes in imparting knowledge and developing skills in them to enhance their capability to take up careers in small and large businesses as well as starting their own businesses. Further, their career expectations and experiences were also investigated. (The School of Business and Industrial Studies (SBIS) as a constituent of the University of Zambia commenced in 1978. The School offers two degrees : Bachelor of Accountancy (BAc) and Bachelor of Business Administration (BBA). But no tracer study has been undertaken to evaluate the effectiveness of its course offerings):

a) their attitudes while at the university;

b) Their attitudes after leaving the university.

5) to find out their attitudes towards leadership code. It was hypothesised that since SBIS University students propagate Marxism while at the University, they may not support business ownership by leaders. Further it was thought that their attitudes towards forming their own businesses might be influenced by such Marxist views;

6) to assess small business stimulatory policies:

a) government's fiscal and non-fiscal incentives;

b) voluntary /private financial and non financial organisations (District Councils), their roles in promoting small businesses and incentives they offered.

7) to find out the extent to which SIDO has been encouraging new firm start-ups as opposed to propping up already existing businesses:

a) in urban areas, their numbers and types;
b) in rural areas, their numbers and types.

8) to draw general inferences from the above factors, variables and the whole analysis of the study;

9) to make recommendations to:

a) The government;

b) SIDO;

C) Small business community;

d) School of Business and Industrial Studies;

On the necessary changes if any, performance expectations and potential benefits.

SECTION II: LITERATURE SURVEY: BACKGROUND TO THE STUDY: CHARACTERISTICS OF THE ZAMBIAN SOCIETY (POLITICAL, ECONOMIC AND SOCIAL)

CHAPTER 3 BACKGROUND TO UNEMPLOYMENT IN ZAMBIA

3.1. INTRODUCTION

The purpose of this section is to provide an insight into the unemployment problem in Zambia, its major sources as well as some constraints to provide more employment in the formal sector. The last two chapters, this chapter and chapter 4 (which deal with the role of small scale business in Zambia) form the corner-stone of this research study. Chapters 3 and 4 which provide the background to the issue under investigation are helpful in outlining the difficult position Zambia faces in solving its unemployment problems. They also provide assistance in data analysis, and in gauging the extent to which Zambia can rely on school drop outs to form small businesses and for the latter to reduce unemployment.

Zambia, gained her political independence from Britain in 1964. It is a land-locked country in central Africa, bordering eight countries. Before independence, it was initially a British protectorate until 1924, administered by the British South African Company (founded by Cecil Rhodes). Since then, it was a British colony until 1953 when it was incorporated into a Federation of Rhodesia and Nyasaland, with two other members: Zimbabwe (formerly Southern Rhodesia) and Malawi (formerly Nyasaland). The Federation broke up in 1963, a year before

Zambia's independence (Van Derhoeven, 1982: 218). Zambia is three times the size of that of the United Kingdom (about 752,620 kilometres or 94,500 sq. miles). For the map of Zambia in relation to Africa and the World as well as the areas where research was conducted, see Chapter 5 appendix 5 Exhibits 3 and 4. Zambia's population has doubled since independence (23 years) having grown from 3.5 million people (Central Statistical Office, Lusaka -CSOL, April., 1983:4) to about 5.5 million in 1979 CSOL, Jan/March, 1979:14), and to an estimated figure of 7.2 million in 1987. The growth rate was 3.6% in 1987 compared to 3.1 during the 1969-80 period. (National Commission for Development Planning- NCDP, Jan. 1988 :51)

Zambia faces many economic problems, but unemployment and inflation are viewed as the two most grave. (NDCP, 1979:14).

3.2 DEFINITION AND TYPES OF UNEMPLOYMENT

Unemployment is normally defined as the difference between the number of people who are willing and able to work at the ruling wage rates, (labour force) and those who actually obtain jobs. The unemployment rate, then is the quotient of this difference divided by the labour force (Hare, 1982:1). In Zambia, unemployment is measured as the number of people registered as unemployed at Labour Offices of the Ministry of Labour. The unemployment level is underestimated since the majority of people may not register because they estimate that the chances of getting a job are very limited (see 3.3 for the basis of this assumption). The labour force in Zambia is defined as that part of the population above the age of fifteen, who are either employed or unemployed but available for work (NCDP, January, 1986:27).

The types of unemployment, can most usefully be classified as a) frictional, b) seasonal, c) structural and d) demand deficient or cyclical (Hare, 1982: 1-5, Brown, 1984: 80-105).

a) Frictional unemployment is temporal, voluntary unemployment caused by willingly quitting one's job to seek for another for a variety of reasons. These can be higher wages, improved job, superior prospects or better part of a country. It may be caused by redundancy such as when the person declines the first job offer to search for a better one.

b) Seasonal unemployment exists when there is low demand for labour due to a corresponding low demand for the product or reduced production industries during certain periods of the year. Examples are agriculture, toy making tourism, or construction.

c) Demand deficient or cyclical unemployment takes place when there is short-term inadequate effective aggregate demand at all markets for the products of a given country due to the state of the trade cycle. This is usually the type of unemployment experienced during a recession.

d) Structural unemployment is long-term and occurs when the labour force is not well matched to the capital stock. This mismatching may be in terms of skills or industries or regions or any combination of these. This may be caused by such factors as:

(i) lack of complementary factors of production;

(ii) technological progress resulting in altered required skills to produce the same product;

(iii) change of consumers' tastes and preferences resulting from or into new products rendering the old ones unpopular;

(iv) use of capital intensive technology requiring less people;
(v) immobility of labour;
(vi) population explosion etc.

It can be complete or partial as the above factors clearly indicate.

Zambia's present serious unemployment is primarily cyclical and structural although the other two also exist. Cyclical unemployment is influenced by the low demand for copper, which is Zambia's main export, by Western industrialised countries, the major consumers of Zambia's copper.

3.3. THE UNEMPLOYMENT PREDICAMENT IN ZAMBIA

The perilous nature of the unemployment problem is not fully revealed in Government official statistics because it seems that most people do not register at labour offices due to low expectations of job placement. This view is based upon analysis that out of an estimated population of 7.2 million people in 1987, with a labour force of about 2 million only 356,530 or 185 in 1,000 people were employed (NCDP, 1987: 85). In addition, the proportion of total labour force to total population has been put at 28% between 1980 and 1985 (NCDP, Jan., 1988: 28). But about 45% of the population live in urban areas (Todd et. al., 1978: 7). In addition, 80% (i.e. 2.2 million) of the urban population (about 2.7 million), are under 35 years of age, while the proportion of those who are in their early years of working life in the age group 15 and 35, accounts for 33% (Kanya, Oct., 1983: 1). The issue therefore is how the rest of the population without jobs comprising about 95% survive.

The brief answer is that the majority are peasant farmers living in rural areas. A good proportion among those living in urban areas are involved in informal activities. Others depend on nucleus and extended families, particularly the youth whose age group 0-19 years comprised about 59.7% of the total population in 1987 (NCDP, Jan., 1988: 52). The dependency ratio of about 1,048.1 per 1,000 population during the same period "continued to be very high as compared to the other African and world average ratios, respectively" (NCDP, Jan., 1988: 52). Refer also to section 3.4.3.2 and 3.4.3.3.

Bardouille's (UNDP,1987: 2) observation also helps in explaining the disguised levels of unemployment. He refers to the 1980 census where the labour force was defined to be those persons aged 12 years and above. About 3.3 million people were classified in this category, of whom 3.2 million were Zambians and 0.1 million were non-Zambians. Out of the total Zambian labour force, about 1.7 million (54.5% of the population aged 12 years and above were categorized as economically active). That is working (in formal and informal sectors) and seeking work. But the rest accounting for 1.5 million were economically inactive (for example full time house wives, students, disabled pensioners, etc.). About 71% of the male labour force was recorded as economically active. But the proportion was 37% for females. The total participation rates for the rural and urban population were 54.3% and 53.7% respectively. The activity rate for the males in urban areas was slightly higher at 73.4% than in the rural areas (70.4%). In the rural areas females were more economically active (39.8%).

In order to appreciate the unemployment problem in Zambia, the task facing the Government and the pressures for creating more jobs, and to help evaluate the chances of success in job creation it is critical to briefly reflect on the employment growth trends, since independence and particularly over the three national development plans.

The unemployment problem dates back to the pre-independence period. But it was claimed that there was no unemployment problem merely because of "statistical acrobatics" (Clark, cited in Mkandawire, 1983:18-20) and repatriation policy of the unemployed to rural areas (Mulwila and Mushota, Nov., 1981: 7).

At the time of independence, the level of total employment was only 268,590 out of a population of about 3.5 million people (CSOL, Apr.,1983: 4). After independence, a target of 100,000 jobs were set for a five year, First National Development Plan (FNDP), 1966-70, in the formal sector. At the end of the period, nearly 60% was achieved, thus increasing total employment to the peak of about 342,870 (CSOL, Apr.,1983: 9). Performance was poor during the Second National Development Plan (SNDP) 1972-76. Change in employment was only 2,800 (from 365,550 at the beginning of the period to 368,380) although a target of 100,000 (20,000 annually) increase had been set (see table 3.1). Hence the overall picture was that employment level remained basically constant on the average. For a breakdown according to sectors see chapter 3 appendix table 3A.1. It will for example be seen that the contribution of the manufacturing sector was 320 jobs only.

The performance during the Third National Development Plan - TNDP (1979-83) was worse. Out of a population of 6.5 million people at the end of 1983, (NCDP, Dec., 1988: 68), the labour force was anticipated to increase from 1,586,200 in 1977 to 1,962,300 (31% of the population) by the end of the TNDP. This represented an increase of 376,100 (23%). This required creating (63,000) new employment opportunities per annum in the formal and informal sectors to absorb the new additions to the labour force, (NCDP, 1979: 56-57). In 1982, ILO/SATEP estimated that if the growth rate of the population remained at about 3.5% per annum, then the annual rate of growth of wage employment would have to be 17% instead of 1.1% to absorb all job-seekers in Zambia (ILO/SATEP, Report to Govt.,1983:3). Wage-paid employment was anticipated to increase from nearly 389,000 in 1978 to 468,000 (24% of the labour force) in 1983 during the TNDP. This represented an assumed average growth rate of 3.8% or annual job creation of about 14,000 against the required number of 63,000 across all the sectors from 1978. It was expected that this would still leave a labour surplus of 1,494,300 or about 76% of unemployed labour force. This meant that only about 24% (468,000 out of 1,962,300) of the labour force would be absorbed. For projected increase in wage-paid employment by sector, see chapter 3 appendix table 3A.2. It will be seen that the expected contribution by the manufacturing sector was 24,000 jobs over a five year period.

As early as 1981, Aryee (1981: 1) had challenged this view. He stated that even using employment growth projections of 14,000 persons per year (or 70,000 for five years), there would still be a short-fall of about 20,000 work places annually (or 100,000 for

five years) in urban areas during the plan period. This would imply that the labour surplus would be 1,594,300 or about 18% of the labour force employed.

Early estimates, in 1984, indicated an employment figure of 363,800 by the end of the planning period in 1983 (CSOL, 1984: 5 & Suppl.,:8). This was lower than the existing employment level of 365,540 in 1971 before the SNDP of 1972. This meant that only 185 in 1,000 persons or about 18.5% of the expected labour force were employed in the formal sector. Instead of adding 70,000 jobs, the economy lost 3,180 jobs, in five years or 632 per year (366,960-363,800) between 1978 and 1983. This therefore meant a short fall of about 73,000 jobs or -4.3% from the target as table 3.1 shows.

The table also shows that estimates in 1986 for the Fourth year Development Plan indicated that by 1991, employment would fall to 351,970 (a loss of 13,870 jobs from the 1987 figure of 365,850) if the prevailing economic conditions persisted (NDCP, Dec.; 1986: 99). The employment level of 351,970, would be lower than the pre-1972 at the beginning of the Second National Development Plan (of 365,550) and even lower than the 1986 level of 354,200 (CSOL, 1990: April, 1983).

Table 3A.3 shows employment distribution by major industrial division for selected years from 1964 to 1987. The overall picture was that there was a loss of 11,000 jobs since the SNDP in 1972 or -03%. The share of the manufacturing sector has ranged from 9% to 14%. It was 9% (21,000) in 1964, 11% (38,000) in 1970, 12% (43,000) in 1976 and finally 14% (48,000) in 1987).

This underscores the difficulties the country is facing in creation of employment. The discussions above have shown that there is a high rate of unemployment. The reasons for this situation will now be presented in the next section.

Table 3.1 Comparison between total population, labour force and employment levels during development plans.

Development Plans	Total Population (million)	Labour force (million)	Beginning total employment	Ending total employment	Total employment change	Target employment	Achieved employment	Short fall from target
1964	3.5	-	268,990	n.a	n.a	n.a	n.a	n.a
1966-70	3.5	-	324,230	342,970	18,720	100,000	80,000	-20,000
1972-76	5.4	1.6	365,550	368,360	2,810	100,000	2,810	-97,190
1979-83	6.5	3.0	373,870	363,800	-10,070	70,000	-3,160	-73,160
1986-87	7.2	3.5[1]	360,540	356,530	- 4,010	-	-	-
1987-91[2]	8.4	4.0	365,650	351,970	-13,679	-	-	-

Sources: For 1963 labour force: MEDP, Dec. 1986 (Fourth National Development Plan draft) table IV.1, For total employment levels, 1964-1976 CSDL, 1980; 1979-83, CSDL 1984 & suppl; 1986-86, MEDP Jan. 1988 table VI.1; For target employment and achieved employment levels: FNDP, SNDP, TNDP and MEDP (economic reports) 1984 & 1987. For 1987-1991 MEDP, Dec. 1986. table VI.5.

Note: total population and labour force is for end of period.

1 Preliminary average figure for quarter ending June.

2 Projections for the Fourth National Development Plan (Draft),1987-1991

- means not available

n.a. not applicable

3.4. CAUSES OF UNEMPLOYMENT IN ZAMBIA

The reasons for the high rate of unemployment can be classified into five categories as:

1) Poor performance of the Zambian economy;
   a) overall low industrial growth in Gross Domestic Product;
   b) worsening performance of the mining industry;
   c) lack of development of the agriculture sector;
   d) unsatisfactory industrial growth in the manufacturing sector;.
   e) poor performance in foreign trade;
   f) declining Government's sources of financing investments.
2) Inappropriate technology:
   a) capital intensive methods;
   b) dominance of large scale firms and shops.
3) Increased social problems:
   a) migration from rural to urban areas;
   b) rural-urban gap;
   c) population explosion;
   d) school dropouts;
4) Political:
   a) colonial inheritance;
   b) high commitment to the liberation struggle of Southern Africa;
   c) Leadership code;
   d) top-down approach to traditional humanism by politicians;
5) Cultural reasons:
   a) changing value of co-operative efforts (Humanism);
   b) changing value system (work not valued by young);

3.4.1. POOR PERFORMANCE OF THE ZAMBIAN ECONOMY

Several factors have contributed to the poor performance of the Zambian economy.

3.4.1.1. Overall Low Industrial Growth in Gross Domestic Product

The first is overall low industrial growth in GNP due to both exogenous and endogenous factors. While the major factor of the former has been low copper prices, other factors have aggravated the situation. These are: weather conditions (poor rainfall), stagnation in the industrial world, fuel crisis of 1975, disruption of communication routes due to civil and liberation wars in neighbouring countries and the consequent closure of the border with Zimbabwe (formerly Rhodesia).

Internal factors include first, the poor pattern of maintenance and replacement investment instead of net additional capital stock investment. For example gross fixed capital formation (in 1970 prices) dropped from K378 million in 1970 to K166 million in 1981 (NCDP,1978: 2; Mann, 1981:2) where K1=$0.4. The second factor is importation of highly capital-intensive technology even where labour intensive technology could have been most appropriate. The third reason has been investment in social infrastructure and services. Investment in direct productive sectors have not received the required priority. Economic infrastructure and social community services investment was 47% and 26% respectively while direct productive sectors accounted for only 20% between 1972 and 1978, during the second National Development Plan (SNDP) period (NCDP, 1979: 6-7). The fourth reason is the inefficient use of capital resources.

The fifth is inability of central and local governments in implementing the plans (NCDP,1979: 1-4).

As a result, the growth in the GDP, at constant 1965 prices was only 2% between 1965 and 1970. It was 3.4% between 1971 and 1976 (NCDP,1979: 1). The GDP of K1370 million in 1978 was even lower than the figure of K1436 million in 1975, which represented the lowest growth rate up to 1975. By 1983, the GDP of K1477 million had not surpassed the 1978 level of K1519 million at constant 1970 prices (NCDP, 1979: 1).

3.4.1.2. WORSENING PERFORMANCE OF THE MINING INDUSTRY.

The second economic factor is the worsening performance of the mining industry with poor copper prices (CSOL, 1984:45) and production stagnation (cut backs, depletion, managerial turnover and transportation problems).

3.4.1.2.1 Importance of the Mining Industry

Appreciation of the structure of Zambia's economy, inevitably begins "with emphasis upon the dominant position occupied by the copper industry" (Elliot, 1971 (a): 3). At the time of independence, Zambia, inherited a mono economy greatly dependent on copper which accounted for over 90% of total export earnings (NCDP, 1979:8; Fry, 1979:22), 53% of total government revenue, about 41% of real GDP (NCDP, 1979: 4-5 & 213) and about 21% of employment (CSOL, 1980: 10). Other sectors of the economy such as agriculture and manufacturing were thus insignificant.

According to the UNCTAD Secretariat, Economic dependency is defined as the percentage of export earnings a country receives from one or two main products (Laiday and Laishew, 1980). Zambia can be categorised as highly dependent since an average of 83% of all its exports between 1970 and 1978 was derived from one commodity i.e. copper (Van Der Hoeven, 1982:218). The broader definition of dependence applied by Elliot (1971 (b) in Van Der Hoeven, 1982:217) refers to a situation "in which economic entity A controls the flow of resources to economic entity B" and "by implication B has no means of controlling the flow of equivalent resources to A and is therefore at the mercy of A". This expansive approach includes aspects of foreign investments, banking, aid and skill and earnings from commodity exports, all of which were and still are true to Zambia (Van Der Hoeven, 1982: 217).

Zambian mining industry holds an important and strong position even on the world level. In 1978, Zambia was ranked fifth as a producer of copper, second as a producer of cobalt and twentieth as a producer of lead (NCDP,1978: 213). Other important minerals produced include Zinc, Silver, Coal and Emeralds.

Since 1975, the importance of the mining industry has been declining due to low copper prices at the London Metal Exchange (LME) and stagnation in the production level of copper. But this sector (particularly the copper mining industry), still dominates the Zambian economy. The sector's contribution to the country's foreign exchange earnings is still well over 85%. It, for example, accounted for 87.6% of earnings in 1978. It is still the highest contributing sector to GDP, the share having been 24% in 1971 at constant 1965 prices (NCDP, 1979:3), 33% in 1977, and 32%

(K470 million of K1477 million) in 1983 at constant 1970 prices (CSOL, 1984: 48).

Until recently, the sector's contribution to paid employment and government revenue, has normally averaged about 30% each (NCDP, 1979: 213). In 1968 and 1969, the contribution of mineral revenues to Government recurrent account was 60%, it dropped to 54% in 1970 (NCDP, 1979: 5).

3.4.1.2.2. The Declining Importance of Copper.

The sector's contribution has however been declining since 1970 and in particular since 1975 due to several reasons. First, there has been a new deliberate Government's policy of diversifying the economy in realization of the peculiar volatile position of the mining industry without success and for the basic reason that copper like other minerals is an exhaustible resource. It has for example been estimated that if world usage rate of the minerals rises exponentially, all resources would be finished within the next 50 years (Papworth,1973: 43). Diversification has, not been successful because it seems to be a vicious circle whereby investment capital has to be generated from the mining industry, hence requiring further development of the industry.

The second reason for the declining importance of the mining industry is the poor price of copper, at the LME, which fluctuates greatly. In 1975, it was, for instance, at its lowest (K794 per tonne) in real terms (having increased by 73% over the 1972 price only the previous year). But in 1980, it more than doubled (K1719) the 1975 level (see table 3.2).

Table 3.2 Price of Copper by years

year	1970	'72	'74	'75	'77	'79	1980	'82	'83
Price K	1011	785	327	784	1018	1572	1719	1374	1985

Source: Extracted from central Statistical office, Lusaka (CSOL) Monthly Dig. of statistics July/Sept.,1984:45 T.S K1=$0.4 Nov.'84.

The third explanation has been the stagnation in the production level of copper due to five reasons: First, cut-backs as decided upon by the Copper Industries Producing and Exporting Countries (CIPEC); Second, depletion of old existing mines; Third, high rates of turnover among managerial, technical and supervisory staff; Fourth, transportation difficulties; Fifth, maintenance and replacement investment practices instead of enlarging productive capacity. All these have led to production of less than full capacity (NCDP, 1979: 15). The ultimate negative effect has been a decline in jobs in the sector.

As a result of this decline in the importance of copper, the Government has been trying to shift the emphasis to agriculture and manufacturing, not only as alternatives but also as complementary activities to the mining industry. This is important because agriculture and industry are interdependent for a nation's industrialisation.

3.4.1.3 LACK OF DEVELOPMENT OF THE AGRICULTURAL SECTOR

The third reason for the high rate of unemployment is the lack of development of the agricultural sector. There is no strong agricultural base or link between agriculture and industry (Ng'andwe, Dec., 1983: 2-4). But about 80% of the land in Zambia

is unutilised. President Kaunda has often emphasised that there is no reason why Zambia should be poor since it has abundant resources. He has called upon the people to 'go back to the land' which the party and its government has turned into a free-hold for anybody who wants to develop. Examples of developed countries such as USA and China show that industrialisation was preceded and aided by a strong agricultural base. In the case of the US for example Presidents Benjamin Franklin in the 1780s and Thomas Jefferson in 1782 encouraged citizens to own land instead of working in manufacturing (Phillips, 1951: 20 & 22).

The reasons for lack of development of the agricultural sector are due to both colonial inheritance (Fry, 1979:22; Van Der Hoeven, 1982:218) and problems as well as mistakes in the post independence period. Sometimes the colonial policy even directly discouraged agriculture development by Africans or for the country as a whole through land discrimination in favour of white settlers, displacing Africans from suitable fertile land (Van Der Hoeven, March-April, 1982: 218, Dodge, 1977: 7; Baldwin, 1966: 144-145). The policy was also achieved through discouraging African production (Makings 1966: 199; Dodge, 1977: 9); or denying marketing facilities or setting low prices for African produce (Ban Der Hoeven, March-APril, 1982: 218, Baldwin, 1966: 152-155; Dodge, 1977: 10-14; Bates, 1976). For example the government accepted the maize committee's recommendation (Northern Rhodesia, 1935(b): 22): "...to remove the threat to European producers of competition from African producers". This was done by dividing the market into external intended for exports, in which African had no share and internal where Africans were allocated a quarter of the pool. They also

received much less price than their European counterparts (Van Der Hoeven, 1982: 218; Dodge, 1977: 10).

During the Federation, the Federal government with its headquarters in Salisbury did no better as it favoured Southern Rhodesia by taking over the responsibility of marketing her maize produced by European farmers while Northern Rhodesia had to fend for herself (Baldwin, 1966: 180-189; Van Der Hoeven, 1982: 220). This encouraged more farms to be established in Zimbabwe, which up to today is an agricultural exporting country.

The post independence performance of the agricultural sector has been very poor too. This has been due to poorly set and implemented development plans (Dodge, 1977: 55). Out of the three possible options of individual capitalism, macro-socialism and micro socialism, the government adopted micro socialism approach because of Zambia's humanism philosophy as expounded by president Kaunda (1968:7 & 13; 1969, 1970, 1971 and 1974). Macro and micro-socialism refers to location of the area where public funds are spent at the centre or in the rural areas respectively. On January 17, 1965, the President called upon (Dodge 1977: 62, Lombard 1971: 22):

> "all the unemployed in Zambia to form co-operative societies..."

He declared:

> "The money is there, and the know-how is there. You can form these co-operative societies any where in Zambia and we shall assist you in getting on"

But due to problems of implementing the ideal rural area policy, the government fell back on a more centralised system.

Different schemes were developed but they did not succeed because of the manner of planning and execution of such programmes as the defunct co-operative societies which had tremendous initial response (Central Planning Office, 1965: 24) and the corresponding tractor mechanisation programmes (Central Planning Office, 1965: 34-35; Dodge, 1977: 62-63, Central Planning Office, 1965: 24). President Kaunda, for example, in the end criticised the biased attitude of emphasizing capital rather than labour intensive projects (Zambia, 1970: 19, 28) such as the "ill-fated tractor scheme proposed by the experts of the ECA/FAD report" because (Kaunda, 1968: 13):

> ...if we equate development and progress only with the number of tractors used, with the number of big projects,...then we will soon face very big problems.... Development that is restricted to [these]... is ...no development at all".

The more fundamental explanations for the failure of the co-operative and mechanisation programmes were first poor attitude of Zambians towards government assistance and the "spoon-feeding approach" by the government (Zambia 1970: 34). Second, lack of fully understanding (Siddle, 1971: 84).

> the meaning of the term co-operative [and not being] used to the responsibilities of loan management or the techniques of cash agriculture.

Third, poorly executed credit facilities through the Credit Organisations of Zambia. The administrative structure proved "inadequate to allocate, distribute and recover loans efficiently" (NDCP, 1971: 15). For example, loans were often approved too late (Dodge, 1977:88). Fourth, exploitation of fellow co-operative members by the few better educated ones due to ignorance, lack of formal education and lack of training in co-operative farming. Fifth was the inefficient operation of co-operatives. Sixth adverse terms of trade due to poor prices

received (Lombard, 1971: 33; Dodge 1977: 83).

In the light of the constraints outlined above, it is not surprising that contribution of the agriculture / forestry and fisheries sector to real GNP has virtually been constant at about 14% since 1965 as table 3.3 shows (NCDP, 1988: 172). The table also shows that the total annual growth has not surpassed 3.6% (having been 0% between 1976 and 1983 at 1970 prices) (NCDP, 1979: 14; csol, Sept., 1984: 48; NCDP, Dec., 1988: 173). The share of the agricultural commercial sector has been a maximum of 5.7 while the subsistence sector has been 11.1% as table 3.3 indicates (NCDP, 1979: 39; NCDP, Dec., 1988: 174). The sector's contribution to employment has been basically stagnant at about 9% over the last 20 years. It was for example 9% (32,760 out of 378,300) in 1980 and marginally increased to 9.7% (35,400 out of 365,180) by 1984 (NCDP, Dec., 1988: 175). In conclusion, it is clear that the sector's performance has been very bleak as the average annual growth rate has been 0.3% for 18 years with 14% contribution to GDP.

Table 3.3 Performance of the Agricultural sector over the FNDP, SNDP AND TNDP

	FNDP (1966-70) %	SNDP (1972-76) %	TNDP (1979-83) %
Contribution to GNP	14	14	16
Annual growth rate	1.8	3.8	0.8
Share of Agricultural commercial sector	2.6	5.5	5.7
Share of subsistence sector	11.1	8.7	10
Employment contribution	11	8.7	9.7

1 FNDP and SNDP was at 1970 constant prices while TNDP was at 1977 prices.

Source: FNDP, SNDP, (NCDP, 1979); CSOL, Apr., 83 and CSOL, Sept., 1984; TNDP: NCDP, Dec., 1988.

3.4.1.4 [redacted]

The fourth economic influence on high unemployment is the unsatisfactory industrial growth in the manufacturing sector. It is characterised by the predominance of consumer goods, dependence on imported raw materials (NCDP, 1979: 235) and limited foreign exchange (NCDP, 1979: 14-17).

This unfavourable position has been so despite that after independence, Zambia's industry (except mining and related activities) expanded quite rapidly. Its value added, for example, increased from K49 million in 1965 to K164.5 million in 1972, at constant 1970 prices (Van De Hoeven, 1982: 222). The rapid expansion was forced by the Unilateral Declaration of Independence (UDI) in Rhodesia which led to both negative and positive factors. The former were closure of the border by cutting off of the main road and rail transportation routes through the South and severing economic links and dependency on Rhodesia and South Africa (the traditional suppliers of goods). The resulting benefits were:

(1) the need to develop new infrastructures;

a) opening up of new routes to the North with Tanzania
   (i) the railway line;
   (ii) expansion of the old Great North Road to handle more and heavier traffic;

b) establishment of road haulage

c) construction of an oil pipe line;

d) building of a refinery in Ndola to supply the needed fuel;

e) other related activities.

(2) localisation of consumer manufacturing industries which were established in Rhodesia.

The rapid expansion of the sector however led to many negative consequences (Seidman, 1974; Van De Heeven, 1982: 222):

1) more dependency on imported raw materials;
2) lack of significant change in the composition of the manufacturing sector;
3) reduced number of establishments (as expatriate owned and multinational firms closed down organisations or taken over by the state) but increased number of workers and invested fixed capital per worker;
4) concentration of manufacturing firms along the old line of rail; and
5) economic reforms of 1966 leading to change of ownership from private hands to state ownership, but are "grossly under-capitalised... face shortages of raw materials and spare parts due to lack of foreign exchange resulting in cutting of production drastically in some cases to a bare 20% of capacity" and "averaged between 40% and 50% for public enterprises during the TNDP (Turok,1979; NCDP, Dec.,86:264).
6) lack of meaningful import substitution in most industrial firms (NCDP, 1979: 235).

The growth rate of the manufacturing sector declined from 4.8% between 1965 and 1970 to 4.5% between 1971 and 1978 although the target growth rate was 14.7% per year for the SNDP (1972-1976). It dropped to 0.5% compared to a target rate of 8% during the TNDP (NCDP, Dec., 1986: 263). The annual value added rate was 10% between 1971 and 1974, but nose-dived to -3.9% in 1975. It increased slightly to 4.1% in 1976 but declined to -7.4 in 1983 (NCDP, Dec., 1986: 265). The fall in 1975 resulted from the tightening up of the foreign exchange and import licence

allocations following the poor performance of the economy in 1974. The dismal performance over the TNDP has been attributed to non implementation of some important objectives of the TNDP i.e. export promotion, local raw material utilisation, appropriate choice of technology, linkages between agricultural and industry, and import substitution (NCDP, Dec., 1986: 264). The manufacturing sector's share to GDP has therefore basically remained constant, having increased from 10.2% in 1971 to 12% in 1974, but declining to 10.8% in 1978, before rising marginally to 11.5% in 1980 and 12.3% in 1983. Transport problems and port congestion compounded the difficult economic situation (NCDP, 1979 15-17). The rate of growth in employment has been poor as seen earlier. This was for example 1.5% per annum over TNDP (NCDP, Dec., 1986: 266).

A policy of encouraging many companies to export has not been successful although a few of them export such products as copper-wire rods and cables, car batteries and clothes. Thus diversification policy on the whole has not, unfortunately been successful. The major constraint has been dependency on imported machinery and raw materials which are not easily available due to shortage of foreign exchange because the balance of trade position has deteriorated.

Other less important directly productive sectors are construction, electricity, gas and water which contributed 2% in 1971 and 6.8% in 1983 (NCDP, 1979: 3-4 and CSOL, 1984: 48).

3.4.1.5 POOR PERFORMANCE IN FOREIGN TRADE

The fifth economic cause of the high levels of job deficiency is the poor foreign trade performance. Exports increased from K336 million in 1964 to K936 million in 1981 while imports increased from K154 million to K924 million for the same period. Thus export surplus which was K181 million in 1964 increasing to K455 million in 1969, recorded a deficit of K77 million in 1975 and only a surplus of K12 million in 1981 as table 3.4 shows (NCDP, 1979: 7-10; CSOL, 1984: 17). The position had not changed by 1984 as trade balance was K547 million (K1657 million exports and K1110 million imports) (NCDP,Dec., 1988: 27).

Table 3.4 Balance of Trade* 1964-81
(For selected years in K million)

	1964	'69	'71	'72	'74	'75	'77	'79	1981**
Exports	336	787	485	542	898	523	706	1090	936
Imports	154	312	399	403	509	600	530	594	924
Export Surplus	182	455	86	139	390	-77	176	496	12

* Note that Table 3.4 figures are free on board
** Preliminary as of July/September, 1984

Sources: NCDP, 1979: 8, table 1.10 for 1964-1978 and CSOL, 1984: 17, table 18 for 1977-1981.

The country was therefore forced to curtail its imports drastically as one of the corrective measures. Van Der Hoeven (1982: 224) has reported for example that the total drop, for the period 1974-78, amounted to one and three quarter years of imports foregone. But this was not sufficient enough "to make up for the loss in purchasing power of exports which amounted to two and one third years of potential imports over the 1974-78 period".

Foreign payment arrears were rescheduled at a high cost of interest rate, rising from 5.5% of exports in 1970 to 20.8% in 1978. This compared unfavourably with middle-income developing countries of 9.3% and 13.8% during the same period. Increased capital investment was encouraged.

As the economic position deteriorated, Zambia sought assistance from International Monetary Fund (IMF) in April, 1978 subject to several conditions including restriction on government expenditure and Credit Ceiling (Van Der Hoeven, 1982: 225). IMF conditions have been criticised by the ILO/JASPA report (Van Der Hoeven,1983:225) as they were too much geared to reduce excess demand in the economy. It has been argued that Zambia's basic problem is rooted in

> the short supply of goods of all kinds and production, transportation and distribution bottlenecks caused by lack of foreign exchange.

During the TNDP, Zambia once again found it necessary to resort to the IMF for balance of payments support (NCDP, July, 1987:2). Implementation of a whole package of stringent economic reforms and structural adjustment programmes was required. The measure effected in 1983, included decontrol of prices and interest rates, devaluation of the currency, removal of fertiliser and maize subsidies, increased producer prices and liberalisation of agricultural marketing. During 1985-86 period, the emphasis was strict adherence to the IMF/ World Bank programmes, shifting from long term developmental objectives of raising the standard of living of the people to short-term factors of the economy directly linked with balance of payments, payments of debts, high interest rates and the reduction of the budget deficit.

The results, influenced particularly by the introduction of the foreign exchange auctioning system in October, 1985, had adverse effects on the overall performance of the economy. Devaluation of the Kwacha by 955% between October, 1985 and April, 1986 led to accelerated rate of domestic inflation from about 20% in 1984 to 60% in 1986 (MCDP, July, 1987: 3). This increased money supply by 43% (K4.4 billion in 1985 to K6.3 billion at the end of 1986). Inflation rate in turn affected investment and employment (the later declining from 385,190 in 1984 to 380,540 in 1986).

The Party and its Government had to abandon the IMF restructuring programme in May, 1987 due to "intolerable...social economic situation in the country" (MCDP, July, 1987: 3). The programme was said to have ignored Zambia's structural problems and poverty issues. For detailed effects of the IMF measures and reasons discontinuing it, refer to New Economic Recovery Programme, Interim National Development Plan July, 1987-December, 1988. Briefly the measures and negative effects were:

a) *Foreign Exchange Auctioning* - neither discouraged imports nor encouraged exports (led to hyper-inflation)

b) *Decontrol of Prices* - Demand fell sharply due to high rate of inflation, many small enterprises closed down, reduced profitability due to high interest rates.

c) *Upward Adjustment of Interest Rates* - adversely affected production.

d) *Wage Freezes* - led to social unrest in the presence of high inflation (due to price decontrol, high interest rates and foreign exchange auctioning).

e) *Restriction on Government expenditure* - led to increased hardships especially among the middle and low income groups.

3.4.1.6 DECLINING GOVERNMENT'S REAL EARNINGS

The sixth economic reason, has been a decline in government's real earnings from mining (NCDP, 1979:5; CSOL, 1984:25). These are required for investments (Kanya, Oct., 1983:21) in the public sector (parastatals and boards) which provides about 60% of employment while private sectors share is about 30% (NCDP, 1979:415 & 433; CSOL, 1984: 24). The mining sector which used to contribute up to at least 50% to government revenue up to 1970, 64% (K245 million) in 1968-87, resulted into a deficit of -2% (-K9, 799 million) in 1979 and could provide only zero in 1982 and 4% in 1983. The highest contributors now are income tax, and customs and excise accounting for 69% in 1983 although the higher of the two was customs and exercise. Its share was 51% (NCDP, 1979:56; CSOL, 1984:25).

3.4.2. INAPPROPRIATE TECHNOLOGY

Inappropriate technology investments in the industrial and agricultural sector is the second major category of explanations for high unemployment and low incomes (Emmerij, 1974:205). This may be sub-classified into a) capital intensive methods and b) large scale firms and shops.

3.4.2.1 USE OF INTENSIVE TECHNOLOGY

Most investments in the industrial and agriculture sectors have been capital intensive oriented, instead of labour, even where labour intensive techniques could have been more appropriate, as in the the case of Kalulushi and Nega-Nega brick works (NCDP, 1979: 235). An appropriate technology in Africa has

been suggested by ILO to be one which is "suited to the objectives of creating employment and raising the incomes of the 'working poor'" (Emmerij, 1974: 205). It has also been argued that multinational firms may impede transfer of technology since it is often geared for developed countries (Emmerij, 1974: 207). The experience of Zambia has been that large scale plants such as the Livingstone Motor Assemblers have proved unsuitable basically due to shortage of raw materials and components because of inadequate foreign exchange to import the necessary requirements. The small size of the local market has also been a hindrance to multinational firms in transferring their technology into the country. Another hindrance has been the secrecy surrounding such technologies and unwillingness of multinational firms to let go by training local people. Their preference has been to continue sending their own experts to run the plants.

The experience of the Pacific Rim Countries (such as Malaysia and Singapore) however contradicts the notion of impediment of technology transfer by multinationals. There the most recent technology such as the micro-computer is easily transferable. This may however by partly explained by availability of cheap labour and other favourable economic and political conditions which attract multinationals. These countries are used as manufacturing and component assembling centres before exporting the products back to larger markets in developed countries.

In Zambia, apart from the difficulty of technology transfer, the problem of capital intensive projects has also been a result of several factors (Kanya, Oct., 1983: 1-2):

a) shortage of skilled manpower in the country.

b) the high foreign exchange earnings in the sixties.

c) the low bank rate (which encouraged borrowing from commercial banks) immediately after independence;

e) tied foreign loans received by Zambia in economic aid.

As a result, although there were many investments in the manufacturing sector between 1968 and 1973 (NCDP, 1979: 55; Chama, 1982:26), the number of employees rose from 42,000 in 1971 to only 44,000 in 1974 (NCDP, 1979: 15-16).

Proponents of small scale businesses have therefore argued that since they are labour intensive, considerably less investment costs of creating one job are needed, compared to large firms. Various average costs of creating a job in the formal sector in Zambia have been reported: K5,000 in 1974 (Haans, Aug.,1982: 3); 21,000 (calculated by this researcher) from Indeco group of companies with total fixed assets valued at K521.1 million and employing 24,330 persons, reported by Haans (Aug.,1982: 18); K45,000 for large firms as opposed to a meagre K3,000 (K1=US $0.80) in the small scale industry (Ng'andwee, Feb., 1984: 3). Comparative figures for the formal small business sector is scanty, but this researcher calculated a figure of K1018 from a pilot study (Kanya & Mbenkele, 1983: 5-7) of five small businesses with total capital of K620,000 (excluding buildings and vehicles) and employing 610 people.

3.4.2.2. DOMINANCE OF LARGE SCALE FIRMS AND SHOPS

Large establishments, large scale construction and highly mechanised agriculture have predominated at the expense of labour intensive small-scale industries, which can absorb more labour (NCDP, 1979: 55-57; Kanya, oct.,1983: 2).

3.4.3 SOCIAL CAUSES OF UNEMPLOYMENT

3.4.3.1 WIDE RURAL-URBAN GAP

The growing rural-urban gap in incomes has made matters worse (NCDP, 1979: 56).

The rural areas (as in many African countries) have endured the greater burden of the economic and social problems. In three of the five countries of Southern Africa (Zambia, Zimbabwe, Botswana, Lesotho and Swaziland), for instance, 5% of the population account for more than 35% of the national income (ILO/SATEP, March, 1983: 4; Olsson, Dec.,1980: 4).

In Zambia, 45% of the total income accrued to only 10% of the population in 1959 while the poorest 60% (the majority being rural dwellers) could only receive 27% (Baldwin, 1966: 48; Van De Hoeven, March-Apr., 1982: 221). These extreme disparities are true even today. While for example 25% of the urban population is living below a minimum basic needs level (estimated by ILO/JASPA to be K50 for rural and K100 for urban areas), 80% of the rural area population does so (Olsson, March, 1981: 28). This results from the concentration of manufacturing enterprises, along the old line of rail in three provinces only (Lusaka, Central and Copperbelt). These account for more than 85% of both the number of manufacturing establishments and total employment (Haan, Aug.,1981: 16).

3.4.3.2 POPULATION EXPLOSION

Population growth at an annual rate of 3.6% in 1987 (NCDP, Jan., 1988: 5) compared to 2.5% during the 1963-69 period (CSOL July/Sept., 1984: 3) has pushed the population from 3.5 million in 1963 to 6.4 million in 1984 (NCDP, Jan., 1985: 69) and to an estimate of 7.2 million in 1987 (NCDP, Jan., 1988: 51) as table 3.5 indicates. Total population therefore more than doubled (106.3%) from 1963 to 1987 and increased by 77% from 1969 to 1987 (see table 3.5). At the end of 1985, Zambia's population growth rate of 3.3% since 1980 was "higher than that of both the world average and average for the whole of Africa" (NCDP, Jan., 1988:27). The population is characterised by (NCDP, Jan., 1988: 27):

> continued and increasing youthful population which was concentrated in the age group 0-34 years, projected at 5.4 million or 89% of the total population in 1985

In 1987, those in the (NCDP, Jan., 1988: 52):

> age group 0-19 years... comprised about 59.7% of the total population

While those in (NCDP, Jan., 1988: 27):

> the age group 0-14 years was 3.3 million or 49% of the total population

In 1988, the same high rate of youth population continued. About 50% of the national population was below 15 years old (see table 3.6). Dependency ratio was about 1,048 per 1,000 population (very high compared to other African and world average ratios respectively). The high rate of dependence ratio was attributed to "the large share of the youth in the population who were either school-going, unemployed or under-employed" (NCDP, Jan., 1988: 27). The fertility rate was 7.2 children per woman in 1980 (NCDP, Jan., 1988: 52).

The three main reasons for the high fertility rate were "strong values" attached to children, low level of family planning and low mortality rate (NCDP, Jan., 1988: 51). The strong values attached to children are related to the desire to "have large families in case of mortality and even child benefits or as old age insurance" (NCDP, Dec., 1988: 70). Other reasons include: cultural practices such as early marriages, low educational levels of most females (NCDP, Dec., 1988: 70); improved health services, the availability of nutritious food, ignorance, religious beliefs, traditional customs and the absence of government policies to regulate and control births (Kamya, Oct., 83). This therefore implies that there are more young people who enter the job market every year than the old people who retire while formal sector employment is declining. This consequently increases pressure on the government to create more employment (Todd, et al., 1979: 7).

Table 3.5 Population and Migration by urban and Rural Areas

	1963 census (mil)	1969 census (mil)	1974 sample census Final Results (mil)	1980 census (mil)	1987 estimate (mil)	1963-69 Average Annual growth rate %	1969-74 Average Annual growth rate %	1969-80 Average Annual growth rate %	1987 Average Annual growth rate %
Total urban	3.09	4.06	4.68	5.68	7.20	2.8	2.9	3.1	3.6
Total urban Copperbelt Province	0.72	1.19	1.66	2.28	3.36	8.9	6.9	6.7	n.a
Total Rural	0.54	0.82	1.03	1.23	n.a				
	2.77	2.86	3.01	3.24	3.84	0.5	1.0	1.1	n.a
% Urban	20.5	29.4	33.6	43.0	46.6				
% Copperbelt Province	13.5	20.2	22.4	22.0	n.a				
Total % Change Over 1963 Population		16.3	34.1	62.8	106.3				
Total % Change over 1969 Population			15.3	40.0	77.3				

Sources: 1963 to 1980 figures CSO, table 3, July/Sept., 1984; 1987 MCDP, p31-32 Jan., 1988.

Table 3.6 Age structure of Zambia's population for selected years

Broad Age Groups	1980 %	1982 %	1984 %
0-14	49.4	49.4	49.4
15-64	48.2	48.3	48.3
65 and over	2.4	2.4	2.3

Source: MCDP Dec., 1986: table III.2

3.4.3.3 CONCENTRATION OF POPULATION IN URBAN AREAS

Migration from rural to urban areas has grown rapidly by about 30% since 1969 as table 3.7 shows. This has been facilitated by the dismantling of discrimination movement regulations. The urban population growth rate has remained high at 6.7% in 1980 having declined from 8.8% in 1963 compared to rural population growth rate of 1.1 in 1980 compared to 0.5 in 1963 (see table 3.5). The urban population has therefore more than doubled from 20.5% (0.72 million) in 1963 to an estimated proportion of 46.6% (3.36 million) in 1987 as table 3.5 shows (see also Manjappa, 1980: 1; CSOL, 1984: 3).

The concentration of increased youth population presented in the previous section is in urban areas where 80% of the total are under 35 years of age while 33% are in their early years of age of working life, aged between 15 and 35 (Kanya, Oct., 1983: 1). These are either immigrants (Todd, et al., 1979: 7) or born in town, whose proportion was 58% in Kanya's study (Oct.,1983:12-13). This again has the consequence of increasing demand for employment, pushing the annual labour force growth rate to 4% (NCDP, 1979:56).

But employment growth rate has been about 1.3% annually (Haan, July, 1982:19 citing CSOL, 1980:37). Manufacturing establishments in urban areas where 85% of them are provided have been declining as seen in previous sections. Increasing youth urban population led therefore to mounting pressure on the government to increase job opportunities.

Table 3.7 Percentage Distribution of life migrants by migration Types, Zambia 1969 and 1980

		1969 %	1980 %	Percentage change (1969-80)
1.	Rural-Urban	79.3	55.4	30.1
2.	Urban-Rural	2.7	13.0	-318.0
3.	Rural-Rural	14.9	22.4	+50.3
4.	Urban-Urban	3.1	9.2	+196.0
	Total	100.0	100.0	

Source: NCDP, Dec., 1986 Table III.4

As recent as June, 1985, the Prime Minister Kebby Musokotwane called for (Times of Zambia June 28, 1985: 1):

> practical solutions to youth unemployment in Zambia as theories have failed to provide an answer to the problem.

He warned that time was running out and danger signs were "now clearly on the walls"

The youth unemployment problem in urban areas though serious, is not new. It was recognised during the pre-independence period in 1960 when the governor ordered the creation of a Rural Economic Development Working Party to formulate a policy to find (Northern Rhodesia, 1960:4-5 cited in Dodge, 1977: 37):

> ... productive work...in rural areas...for a high proportion of our young people leaving school...[but] will no longer be able to find employment in the town.... If it is not found, the political and social consequences will be serious. This problem must be tackled now if it is to be solved.

3.4.3.4 HIGH RATE OF SCHOOL DROPOUTS

The last social problem that has contributed to lack of jobs is the accelerated rate of school dropouts particularly at grades VII, X and XII levels, resulting in low terminal education age.

This acute problem is compounded, at primary school level by the system of progression barriers (even at grade 4, especially in rural areas) due to shortages of classroom facilities. For Zambia as a whole, only 77% of grade 4 pupils could find places in grade 5 in 1976. But in rural areas the progression rate was as low as 63%. This plight is most critical at grade VII level where the progression rate to grade VIII (or form I) is very low (21% in 1977-78). Therefore about 121,900 are literally prematurely dumped onto the streets at grade 4 while a further 87,000 join them after grade VII alone every year (NCDP, 1979: 333-342). In 1984, for instance, only 22,021 out of 143, 113 or 16% of pupils, who sat for grade VII examinations in Dec., 1983, could find places in grade VIII (Sunday Times March 11, 1984: 1).

This sad situation permeates the educational system. Although about 150,000 are enrolled for grade 1, only about 22,000 enter grade VIII, 9,000 go to grade XI (senior secondary school) and about 6,000 are absorbed in technical education while about 3,000 enter university education (see also Kanya, Oct. 1983: 3; Hopper et. al., 1983: 18).

The lack of places resulting in low levels of education is partly historical. More money was spent on European education even though its total population never exceeded 2% (Van Der Hoeven, 1982: 220; FNDP, 1966: 2). The result was that by 1963 only 4,420, had passed Junior Secondary School course (grade IX). A mere 961 had obtained the Cambridge School Certificate, grade XII (Mwanakatwe, 1968: 37; Coombe, 1967 and 1968), and barely 100 graduates (FNDP, 1966: 2). This compared unfavourably with other African countries. There were in Zambia, in 1964,

just over 1,200 Africans with locally obtained school certificates comparable to the number of African Secondary School graduates in Tanzania in 1960, in Kenya in 1957, Uganda in 1955 and in Ghana in 1943 (Mwanakatwe, 1968:37). The post independence performance was better with annual grade XII turnover of 33,445 (NCDP, 1985: 85) and a total figure of over 7,888 graduates, by 1987, since the University opened in 1968 (NCDP, 1985: 74A, Chana, 1982: 29; UNZA, Oct., 1981; NCDP, Jan., 1988: 68).

One of the effects of low terminal age and educational level is that this group is unable to get a meaningful occupation. It suffers the highest unemployment rate. Kanya (1983: 14) found that about 93% of the youths between the age group 15 to 25 years had attained grade VIII or below and 91.1% were doing nothing. A survey conducted for the Ministry of Labour, in 1980 revealed that the age group between 15-24 suffered 80% of total unemployment though it accounted for 30% of the labour force (Aryee, Nov., 1981:1). Yet Kanya's (1983: 22 & 28) study found that the minimum educational level required to get a job in the formal sector was grade VII by a majority of 33 responding companies (36%), followed by grade X (26%) while 10% had no minimum. But only 11.9% (3,156 out of 26,494 employees) aged between the ages of 15 and 25 were employed. In the last five years, inability to find jobs has extended to form V high school leavers who did not face this problem before. Recent developments have also indicated that unemployment is not only limited to primary and secondary school levels but also to a "considerable number of university graduates" (African Business, March, 1984:60). Emmerij (1974: 213) has referred to this

problem common among developing countries, as the "educated unemployment" problem resulting from a mismatch between the "expectations and aspirations" of school leavers, and available income earning opportunities. This was referred to earlier as structural unemployment.

3.4.4 POLITICAL INFLUENCE OF UNEMPLOYMENT

3.4.4.1 COLONIAL INHERITANCE

Disguised unemployment through official statistics, unemployment during the colonial era and other aspects of unemployment problem inherited have already been discussed in various sections above such as agricultural, manufacturing and educational policies. They will therefore not be repeated here.

3.4.4.2 HIGH COMMITMENT TO THE LIBERATION STRUGGLE OF SOUTHERN AFRICA

Zambia has been a front line country in the liberation struggles for independence of several Southern African states. Enormous human and financial resources have been committed to the cause. Economically, Zambia has made many sacrifices, for example, the closure of the border with Zimbabwe referred to earlier in section 3.4.1.4. This resulted in increased transportation costs by diverting to the North. Limiting trade with South Africa, the natural partner, because of its apartheid policies has also serious economic consequences such as increased cost of imported consumer goods, raw materials and machinery from distant overseas markets.

3.4.4.3 LEADERSHIP CODE AS A CONTRIBUTING FACTOR TO UNEMPLOYMENT

The leadership code, subsidiary to the constitution of Zambia (chapter 1) statutory instrument 108 of 1974 sections 2 & 3 forbids leaders

> to carry on any business [including commercial farming or subletting of property] or receive any emoluments other than those payable to him in respect of the specified office.

The only exception is if he elects not to receive a salary in respect of the office he holds (section 5). A leader includes almost every Zambian citizen since the effective minimum annual salary was set at K2,500 (in 1974). Property or assets exclude cash and bank deposits if the total amount does not exceed K2,000. But it includes his house. Section 10 prescribes that such a leader should "dispose of all such property or assets to a person other than his spouse or child". This affected (First Schedule, reg.2) all persons holding office in the party; the government; any local authority; any statutory corporation, body or board, including institutions of higher learning, in which the state has a majority or controlling interest; any commission established by or under any law; and the Zambia Congress of Trade Unions or any registered trade union.

The issue is: If almost all Zambian workers who have the means of forming businesses later in their lives, are forbidden who else can form businesses? These are desperately needed to form a large economic base to support the rest of the population which is not engaged in any gainful activity. As seen earlier the workers are a tiny proportion of the total Zambian population.

The code then discourages this small number of workers to save money in excess of K2,500, which is needed for investment. It encourages consumption. The argument then is how small businesses would be created. It would therefore appear that this policy discourages business start ups. This ultimately increases unemployment since fewer businesses are created.

3.4.4.4 TOP-DOWN APPROACH TO TRADITIONAL HUMANISM BY POLITICIANS

In Zambia, Humanism puts man at the centre of all human endeavours. He is "the beginning and end of all economic activities; and indeed all development efforts revolve around him" (NCDP, 1979: 403). This is expanded in President Kaunda's (1968a and 1971) the writings (Humanism Parts I and II). Kaunda (1968a:7) stated when emphasizing the centredness of man

> African society has always been man-centred. Indeed, this is as it should be, otherwise why is a house built? ... Why make a chair at all? ... The simple and yet difficult answer is MAN. Simple in the sense that it is clear all human activity centres around MAN: difficult too, because man may not understand his own importance.

Traditional humanism while encouraging co-operative efforts did not detest capitalism, coming from the sweat of an individual. It did not impose any limits on property ownership. However, present, political expression humanism while accepting this mixed political/economic structure, limits size of property ownership and the size of a private business, beyond which state participation will be required.

The limit has never been clear. But it appeared from the sizes of organisations which were taken over during the 1968 reforms, that the maximum size was K500,000 worth of capital for

an individual. The reasoning being that larger size interferes with socialistic objectives. In fact some areas, such as insurance and mining, private enterprise formation is not permitted (SIDO Act, Section 1; Manjappa, 1982: 8). The argument is therefore that this top-down humanism may discourage the creation of business and consequently limit employment opportunities. In theory government participation should not constrain the formation of very small businesses since these are defined by SIDO Act as having a maximum of K250,000 of capital.

However, in practice it does because some people may want to form growth businesses. An imposed limit may discourage willing and capable individuals from starting up private enterprises for fear of risking their businesses to being taken over thereby stifling entrepreneurship.

This reasoning is supported by government's lack of clear-cut definitions of the extent and objectives of state participation, both commercial and non-commercial, in operational terms. Contradictory policies, statements and assurances on the type of economic structure exist. This creates uncertainty and reinforces fear in potential and practising entrepreneurs.

In the TNDP, the rightful place of the private sector both domestic and foreign is recognised (NCDP, 1979: 21-23). It has also often been stated that Zambia has mixed economy (Kaunda, 1968a: 7). But the same TNDP states: "...effective transformation of the present mixed economy into a socialist economy will require further strengthening of the public sector (NCDP, 1979: 415). Such contradictory policies cannot encourage

investors who are very sensitive to uncertainties to start up businesses. some may even opt for investing outside the country. Consequently, unemployment would increase. The reasons are very simple to understand. Social psychologists such as McClelland in his expectancy concept argue that a person will not put forth effort if the expected rewards are negligible. Hence, many potential businessmen will not start businesses or if they do will not expand for fear of being forced to sell their businesses to the state. The result leads to the second reason. Imposed humanism will lead to few businesses. Third, individuals who cannot work alone on tilling the land due to the declining traditional humanism cannot find employment due to a small number of businesses and small size of such businesses.

3.4.5. CULTURAL VALUE

The last main reason for lack of jobs is the declining value attached to working and living as subsistent farmers by both adults and youth.

3.4.5.1 CHANGING VALUE OF CO-OPERATIVE EFFORT (HUMANISM)

The declining value of the concept of the traditional village co-operative effort, Humanism, in tilling fields in preference of cultivating such fields individually, may also be responsible for high unemployment. Traditionally, as president Kaunda (1968a: 13) says, society was man centred in practice because people worked together in fields with individuals helping each other. But the crops remained private property though the haves shared with the have-nots. He put it this way:

> our ancestors worked collectively and co-operatively from start to finish. One might say this was a community way of doing things and yet these gardens remained strongly the property of individuals...capitalism. Collectively they harvested, but when it came to storing and selling their produce they became strongly individualistic. They did not finish at that, when it came to sharing the fruits of their labour like meals, for instance, they shared them communally. Indeed one is compelled to say a strange mixture of...capitalism with communism...

This co-existence of co-operative effort and individualism led Kaunda to refer to its economic form as a 'mixed economy'. Traditional humanism encouraged villagers to till the land by helping those who were less able to do so. It therefore reduced poverty and the number of people seeking formal employment. Its decline in modern times particularly in urban areas where community life is dying increases the number of people who are economically inactive thereby increasing unemployment.

3.4.5.2 CHANGING VALUE OF WORK

In addition to declining value of co-operative effort is the declining value attached to working and living as subsistent farmers particularly by the youth. The later look down upon such jobs, including informal sector traditional jobs, as "dirty [with] low income" (Kanya, 1983: 48) in preference for the "prestigious white collar jobs". But when offered the so called lucrative jobs in the formal sector, some of these youths lack "determination and seriousness" to accept and do offered jobs (Kanya, 1983:27).

3.5. ATTEMPTED SOLUTIONS TO UNEMPLOYMENT PROBLEM

The last section, has shown that there is critical unemployment in Zambia. Secondly, that it is the youth at grades VII and below levels, aged between 15-25 years who are severely affected. Third, the reasons for this situation have been highlighted. This section briefly reviews some steps that have been taken to reduce the problem.

Several approaches have been tried. These include rural development through co-operative movement and the defunct tractor mechanisation programme (discussed earlier) to raise the standard of living and sustain the drift from these areas, village and youth training programmes. Other schemes aimed at economic development and employment generation have included large scale manufacturing plants (MDPNG, 1971:40-41; African Dev., Aug., 1975). Some of these plants established during the FNDP were: Zambia Sugar Company; INDECO Milling (in 1968); Zambia Clay Industries; Dunlop (Z) Ltd.; Truck assembly in Luanshya (1969); Kafue Textiles, Nitrogen Chemicals, Kafironda Explosives, Kabwe Industrial Fabrics (all in 1970); Indeni Petroleum Refinery in 1973.

In order to transfer ownership and control to Zambians through state enterprise, encourage development and direct investment, one of the strategies to accomplish this objective has been effecting changes in the trade sector. The main features have included (MCDP, 1979:288):

> a consistent Zambianisation (nationalisation) of this sector through the transfer of the majority of business enterprises into the hands of Zambia citizens, the setting up and subsequent growth of a strong parastatal sector.

As a result of this strategy, 27 companies in various industries were nationalised during the 1968 economic reforms (Kaunda, 1969:30). These were to operate under a state enterprise, Industrial Development Company (INDECO).

Of the existing types of enterprises i.e. (1) State, (2) Zambian Private, (3) Foreign Controlled and (4) Resident Expatriate which had dominated the commercial and industrial sectors, only the foreign controlled was not affected by the reforms. The reason was that the country needed to attract foreign capital and skills, for example in the mining field (Bostock & Harvey, 1972: 122). Government's policy of participation replaced these four by the seven outlined below:

(1) areas where only government would participate;
(2) areas where government would participate with another government;
(3) areas where government would participate with another government and private enterprise;
(4) areas where government would participate with private enterprise and by mutual agreement government could take full control at a later stage;
(5) areas where co-operatives would operate with or without government participation;
(6) areas where government would participate with private enterprise and
(7) those areas where only private enterprise could participate which would be open to private investor, both domestic and foreign.

In addition, individual entrepreneurship was encouraged through 'forcing' expatriates who were trading in areas outside town centres to sell their businesses to Zambian citizens since non-Zambians were confined to operating in main town centres from the end of 1968 (Kaunda, 1968b; Mushota & Mulwila, Nov.,1981:19).

Further, small and medium-sized government building contracts (those below 10,000), rural transport contracting and quarrying were to be reserved exclusively for the aspiring Zambian businessman. The aim was to "create a vacuum in which Zambians could hardly fail to make faster progress" (Martin, 1972: 75 cited by Mushota & Mulwila:19).

The second economic reforms instituted in August 1969 for the mines were a response to Kaunda's continuing dissatisfaction with the development and investment policies of the mines. Another important reason was to accomplish the government's goal of 'economic independence' (Kaunda, 1969: 30).

More economic reforms were announced by President Kaunda in November 1970. *Inter alia*, State participation in the two large commercial banks: Barclays and Standard banks were effected. They were to acquire other small banks. Insurance companies were closed down and asked to sell their assets to the State Insurance Company by 1st January, 1971. Building Societies were also taken over 100 per cent. A new corporation Financial Industrial Corporation (Findeco) was set up for the financial field. In addition, four more companies in industry were asked to sell 51% of their shares to the government. Ten companies had their licences revoked. The President concluded that there would not be "need to resort to political or government action" in

future (Kaunda, 1971). The government has therefore acquired controlling interest in key sectors of the economy. By 1978, the number of parastatals was 112 (NCDP, 1979:415).

These schemes did not produce significant results, some of which have already been discussed above (MDPMG 1965:34-35; Dodge, 1977: 62-63; Lombard, 1971:22; MDPDG 1966:24; Zambia, 1970:34; NCDP, 1979:411). Apart from the cosmetic changes of confining non-Zambians to town centres, and reserving contracts below K100,000 to Zambians, the three reforms merely transferred ownership from expatriates to the state. A "small number of indigenous people" also benefited (Emmerij, 1974: 210). The concept of ownership of trading businesses for example failed because of lack foresight by policy makers, Zambians were not adequately skilled or financially ready to take over the businesses at that time. Consequently, non-Zambians, especially the Asian community, either quickly obtained Zambian citizenships, or transferred businesses to their Zambian born children or 'sold' to Zambians when they in fact became major partners. They subsequently bought back the businesses when the Zambian 'partners failed'.

Hoppers (1982:176) in his analysis of Lusaka clothing industry, which was part of a wider study conducted in 1981, for example reported that by 1972, there were officially 26 clothing factories, "nearly all with less than fifty employees, owned and run by Asians". He also found that some Zambians established some small factories in the industry in mid-1970s. In 1981, for example, 46 factories were counted in Lusaka, but 18 were run by Zambians, mainly women. These tended to be smaller and employed

It is against this background that in the TNDP, the government embarked on new policy measures including the promotion of small scale businesses to encourage indigenous entrepreneurship, to absorb the large unemployed labour force. In the manufacturing sector, high priority was to be given (among others) to (MCDP,1979:57, 58 & 412):

1. encouraging youth direct participation in production schemes, especially agro-based industries, processing local agricultural products and providing inputs to agriculture;
2. developing industries making maximum use of domestic raw material and intermediate goods;
3. encouraging labour intensive technology;
4. developing small-scale industries "to reduce youth unemployment"

Almost all of the measures above related to the development and promotion of small scale business and rural industries. The implication was that in the TNDP, top priority was given to this sub sector as the main employment creation strategy in both urban and rural areas. Employment creation was emphasized as the major tool for 1) development; 2) raising the standard of life of the poor majority and 3) as an income distribution technique.

To sum up, the main emphasis in the creation of employment through this new government small business strategy was to be:

1) deployment of labour intensive technology, particularly in the manufacturing sector;

2) reducing the urban-rural migration. This was one of SIDO's objectives (Ng'andwee, 1982: 142);

The areas which were to be covered by the small scale and rural industries in these two strategies were:

a) manufacturing and non-manufacturing sectors, so as to generate more employment as opposed to capital intensive firms. It was hoped that this would also encourage local entrepreneurship;

b) agro-industries, food processing industries and ancillary units to manufacture simple agricultural implements and machine tools;

c) village industries which require only simple tools and minimum investment. Some of the activities to be stimulated, developed and promoted included oil-crushing, stock-feed, leather tanning, shoe and leather work and repair, matches, paper, soap making, rope making, basket making, black smithing pottery and such traditional crafts as wood and ivory carving;

d) balanced economic growth. This means an even development between the rural-urban regions, agro-industrial sectors and one region and another.

Observations regarding these objectives are raised in chapter 4.8. It also discusses how the new policy was implemented, objectives and functions of SIDO and the role of small scale businesses in Zambia.

Foot notes

[1] It is not common to include the 12 year (but 15) old persons in the labour force statistics. It is given since it was available in the statistics.

CHAPTER 4. ROLES OF GOVERNMENT AND SIDO IN SMALL SCALE BUSINESS PROMOTION

4.1 INTRODUCTION

This chapter aims at presenting the implementation process of fostering and development of the small firm policy in Zambia. The formation of SIDO and its role are first presented. The need for small scale businesses in Zambia are then analysed. The wider issue of the roles of small scale businesses in general is presented by comparing their roles in Zambia, in developing countries and developed countries. The future of small businesses is then scrutinized. The aim is to find out whether any opportunities exist for the continued survival of small businesses. Situations in which small firms would exist or diminish are examined. The diousion indicates that small firms would continue existing and playing a vital role in a nation's economy. The chapter concludes by evaluating government's small firm stimulatory policy as an alternative to solving the unemployment problem. This is done by looking at fiscal and non-fiscal incentives provided.

4.2 ESTABLISHMENT AND ORGANISATION OF SIDO

Beesley and Wilson (1981: 53) indicate that three areas that may indicate public policy are:

a) legislation in the small business field;

b) public statements by politicians; and

c) other steps and general legislation taken to assist small firms.

In the case of Zambia, public statements made have already been referred to at various junctures of this study. Legislation that empowered SIDO to represent the small businessmen is the subject of this section. See for example chapter 1, technical appendices 1A1 and 1A2, where small firm definition is dealt with, and chapter 3. General legislation will soon be analysed when the issue of non-fiscal policy (incentives) is analysed.

In order to effect the new policy and accomplish the objectives of encouraging business ownership through the introduction of small-scale and rural industries, an Act of Parliament, SIDO Act, was passed in December,1981. UNIDO adviser, Nanjappa, "played a major role in the drafting the said Act" (Ministry of Commerce & Industry, March, 1980:1). The Act was to:

> foster and encourage the development of small industries; to provide for the granting of incentives to small industries; to establish the Small Industries Development Organisation; and provide for matters connected with or incidental to the forgoing.

Part II, section 3 of SIDO Act founded the Small Industries Development Organisation (SIDO), a corporate body, to spearhead the formation of small scale businesses in both urban and rural areas and to support existing ones. SIDO was formally established by the Ministry of Commerce and Industry in December, 1982. Except for the Director, appointed by the Country's President, SIDO's staff are appointed by SIDO itself (Part II, section 10). As required (part II, section 4), a Board of Directors, to advise SIDO, composed of 14 members, has been effected. The chairman has been appointed by the President; two persons with small business knowledge have been appointed by the Ministry of Commerce and Industry; and four Ministries and seven organisations have nominated their representatives (SIDO,1983a:1 & 2).

4.3 OBJECTIVES AND FUNCTIONS OF SIDO

SIDO Act section 6 subsection 1 has vested wide powers into SIDO to perform

> All such acts and things as are necessary to foster and encourage the development of small industries or as are conducive to the attainment of that purpose.

In implementing the Act, SIDO's strategy was aimed at removing disadvantages of "smallness" through planning co-ordinating, promoting and offering all types of industrial extension services with the assistance of other units such as banks and district authorities. The functions of SIDO have been broadly described in policy and legal documents. These are the TNDP (NCDP, 1978:250) and SIDO Act (part II section 6) respectively. In interpreting the Act, SIDO (SIDO, 1983(a):4-7; 1983(b):5-7; 1983(c):7) has outlined its detailed functions, summarised as providing:

1) information (by acting as an information centre);
2) economic intelligence and investigation services;
3) technical services including
   a) technical consultancy,
   b) common facility centres and workshops for training
   c) industrial estates;
4) marketing services;
5) procurement;
6) management development and consultancy;
7) entrepreneur development
8) training
9) financial assistance;
10) research and development and
11) incentives.

It will have been noticed that SIDO's functions are quite elaborate. Acting as an information centre for example includes preparation of model schemes involving designs, sketches and drawings on various types of improved machinery, equipment, tools, dyes, jigs, fixtures and factory layout for use by small businessmen (SIDO, 1983 (c): 7).

The second function, economic intelligence involves carrying out techno-economic surveys including feasibility studies for evaluating the economic and financial viability of projects. Market Surveys useful in national and specific industry planning would also be done (SIDO, 1983(a): 4; SIDO, 1983(b): 4).

The third function technical services involves provision of technical consultancy, that is advice and guidance on all matters relating to establishment and planning of small scale unit. These services include, '*inter-alia*' advising on selection of appropriate technical process, production planning and process, factory layout and designs, selection of machinery and equipment, machinery layout, installation and handling and quality control (SIDO, 1983(a): 4; SIDO, 1983(b): 5; SIDO, 1983(c): 7).

Another responsibility included in technical services is the provision of common facility centres and workshops for training, for undertaking product design, development and testing and job work on behalf of small scale units. These could be heat treatment, forging, electroplating, precision die-casting, welding, tool and dye-making etc.; wood seasoning and leather finishing for the engineering, wood based and leather tanning units (SIDO, 1983(a): 5).

Provision of industrial estates is the third activity of technical services. The objective is to supply factory accommodation to small industries at suitable sites with facilities of water, electricity, steel, transport, banks, post offices, canteen, security arrangement etc., as a way of encouraging good atmosphere for starting industries.

For detailed discussion of the rest of functions of SIDO, refer to SIDO 1983(a), 1983(b) and 1983(c). The detailed sample of functions given above was intended to show the wide ranging functions and the enormous task that SIDO faces. It is clear that accomplishing these would need huge financial and human resources.

Small firm definition debate is the subject of the technical appendices 1A1 and 1A2. It is however important in this chapter to indicate the beneficiaries of the small scale industry policy. Section 2 of the Act differentiates between small scale enterprises and village enterprises, which make up a small scale industry. A small scale industry or sector therefore refers to:

1) small-scale enterprises, engaged in manufacture (excluding mining) or the provision of services, having capital assets not more than K250,000 (£100,000), or as determined from time to time.
2) village enterprises, engaged in manufacture or the provision of services, which:
   a) is located in village, rural or semi-urban;
   b) uses local raw materials

These monetary cut-off points are limited to investment in plant and machinery only, *'vide opere citato'*. This therefore means that the cost of land, buildings and working capital are excluded in practice, although the Act is silent on these. Further, there is more emphasis on the productive and manufacturing sectors. For a discussion of the importance of the manufacturing sector see chapter 1.7.

4.4 ROLE OF SMALL SCALE BUSINESSES IN ZAMBIA

The need for small scale industries in Zambia has been documented in the TNDP (NCDP, 1979: 22, 29 & 32; SIDO, 1983(a); 2; SIDO, 1983(b): 1-2). These may be summarised into six main purposes.

First, small scale industries permit greater distributive justice under the socialistic, humanistic society as opposed to capitalism where concentration of means of production are in a few hands. This strategy is said to fit into the country's short term and long term industrial development. Second, it is also said that small business allows disposal of benefits to a larger population in different regions of the country. This ensures more regional equitable distribution of national income through diffusion of productive industrial activity over wider area and in a larger number of hands instead of concentrating economic power in a few hands in a small number of places. They therefore help in eradicating the regional imbalance and strengthen the economic structure of the rural areas by providing part-time industrial jobs.

Third, they serve as a breeding ground for technical and managerial skills by helping in mobilising untapped resources of capital and skill which may otherwise remain un-utilized. These skills are needed to create rural industries at the base and small scale industries at the intermediary level. This enables filling the existing vacuum at the base created by the presence of many large businesses. The complementary roles of these three (rural, small and large) would create a strong industrial base.

Fourth, small-scale industries are instrumental in mobilisation and greater utilisation of scarce resources such as capital, technical and managerial skills. They can also make more use of the abundant locally available inputs such as raw materials which are required for industrial development. However, these raw materials are exported while importing processed agricultural products, and simple parts and components made of alloys of copper, zinc and tin etc. Since small firms are more labour intensive than medium and large scale industries, both in terms capital equipment per worker and capital employed per unit of output, employment can be created at cheaper costs. It also means that small scale production can create more employment than mass production of similar products with the same amount of capital. For example K5,000 compared to K50,000 per worker needed in a small and large scale enterprise respectively (SIDO, 1983(b): 1). Therefore with the limited foreign exchange, such industries can generate more employment and prosperity.

Fifth, small scale and village industries require a very short gestation period, thus producing results (e.g. employment) quicker than the large scale businesses. Although each firm might, the issue in all these assumptions is the process of persuading people to adopt these approaches which may be difficult or impractical. These points are raised in section 4.8 where governments recent small business policy is evaluating and in technical appendix 2A which deals with entrepreneurship theory.

Sixth, they are more competitive because it is possible to have many small units, thus nearing perfect competition, as opposed to the current trend in most developing countries where one firm is established in one industry. Small firms are

therefore more efficient than big monopolistic competition. This is so because first, there are many manufacturing production activities where there are no significant economies of scale to be gained from large scale production. Second, they can be located to their markets more easily than large ones. Third, they can adopt their products to the specific requirements of customers leading to custom made products.

Other relevant roles in Zambia's case which have not been mentioned in government documents may include: First, that small firms produce goods and services that are appropriate to the basic needs of the local people since they are near proximity. Small scale units can therefore provide many of the services for which demand grows strongly in a rapidly developing community. These may include: repair and maintenance work; establishment of small tool-working factories adjacent to agriculture projects; small building construction activities and various retail shops. Second, they require little technical and organisational know-how since they are not complex.

4.5 ROLE OF SMALL FIRMS IN DEVELOPING VERSUS DEVELOPED COUNTRIES

The role of small firms can be determined by examining its contribution as an employer and as a producer (SBA, 1983: 40). A good indicator of the performance of this sector, is comparing it with other countries on the same variables and preferably for the same period. Since no data presently exists on the performance of the small sector in Zambia, an analysis of experiences of a few developing and developed countries would be useful in evaluating the potential benefits of small businesses.

4.5.1 [redacted]

Some developing countries have longer historical records in small business promotion than Zambia. Highlighting some accomplishments in this sector would be useful to Zambia in its process to small firm development. Manjappa (1984(a): 1-3), a UN Senior Advisor to Zambia on Small Scale Industries stated that in India small firms are well developed, having set up a small business promotional organisation in 1955. By 1980 the sector had established many branches throughout India: 23 major Small Industries Service Institutes (SISI), 10 branch SISIs, and 60 extension centres. The number of registered small scale units increased from 16,000 only in 1960 to 500,000 in 1983 and an estimated equal number of unregistered small scale units. They provide employment to 7.5 million people (38% of total industrial employment), 40% of total industrial production and 38% of exports (having increased from 3% in 1960).

4.5.2 [redacted]

In industrialised countries, the vital role played by small firms in filling a vacuum that large scale businesses cannot economically provide or are unable to has long been acknowledged by governments. In the case of USA, the SBA was set up in 1953, but in the U.K., there is no legal entity to represent small firms.

4.5.2.1 IMPORTANCE OF SMALL FIRM SECTOR IN THE US

In the U.S., the Small Business Administration (SBA) was legally established in 1953 to represent the interests of small businesses. But (Herts, 1982: 81)

> ...the importance of small businesses in a free enterprise system has been recognised by all presidents and congresses dating all the way back to the times of George Washington and Thomas Jefferson

Small firms form about 98% of all commercial establishments; generate about 43% of the aggregate nation's gross national product; though it has been declining since 1972 and was 39% in 1978 (Mitchell, 1981: 9). Their proportion of Gross Private Domestic Product organisation declined from 51.9 to 48.5% between 1955 and 1977 (SBA, 1983: 52). But sales proportion was 45.3% of all sales for all industries in the economy for small firms with less than 500 employees (SBA, 1983: 52). Small firms provided 58% of all jobs accounting for 67% of all newly generated private sector employment between 1967 and 1976 (Mitchell, 1981: 9). Out of 2.7 million jobs created in U.S. industries between 1979 and 1981, the contribution of small firms (those with less than 500 employees) was 80%, firms with less than 100 employees contributed 47% of all net jobs during the same period (SBA, 1983: 40-41). Small firms gained 14.5 million jobs while large firms lost 3.5 million between 1975 and 1987 (Dale, 1987: 1).

4.5.2.2 IMPORTANCE OF THE SMALL SCALE SECTOR IN U.K.

In the U.K., the MacMillan Committee accepted the importance of small firms in 1931 (MacMillan, 1931) and this was endorsed by the Radcliffe Committee in 1959. The committee for example acknowledged (The Radcliffe Committee, 1959: 82):

> ...of the total gross profits earned in manufacturing, building and distribution, ... (one) third is earned by private and unquoted public companies".

Although small firms in the manufacturing sector (those employing 100 or less) constituted a high proportion of 98% (1,300,000) of all firms, their contribution to employment in this sector was lower at 17.1% than other developed countries (Storey, 1982: 8) '*vide ut supra et infra*' for U.S.A. and Japan. The position was not impressive even when the cut off point was increased to firms employing less than 200 people since employment contribution increased to 22.6% only. Their contribution (less than 200 employees) declined from 38% in 1935 (Storey, 1982: 10). The Bolton report (1971: 88) confirmed Britain's poor standing in the manufacturing sector which was the lowest at 31% in 1963. Other developed countries contributions were higher: USA (39% in 1963), France (51% in 1963), Japan (54% in 1966) and Italy (66%in 1961).

4.5.2.3 THE VALUE OF SMALL BUSINESSES IN JAPAN

In the cases of Japan, small firms play a more vital role than in the U.K. According to the recent (1984) census of Japan out of 670,000 industrial units in Japan, 665,000 (99%) were referred to as small businesses (Nanjappa, 1984(b): 1). In the manufacturing sector small firms comprised 99% accounting for 50% of output and 40% of export value. Small firms' contribution to employment was 69.8% in 1972 (Bannock 1976: 22). See also Storey (1982: 8) who reported a proportion of 51%.

In addition to private financial institutions, a network of both financial institutions specialised in small business

financing and government sponsored financial institutions specialising in small industry exist. These include (Manjappa, 1984(b): 3-8):

1) financial Institutions specialised in small business financing:
   a) mutual loan and saving banks (private financial institutions numbering 75 with 2,383 offices);
   b) credit Associations (526 with 3,501 offices);
   c) credit Co-operatives (541 with 1,924 offices).
2) Government sponsored financial Institutions specialising in small industry:
   a) small Business Finance Corporation (government institution with 36 branch offices);
   b) people's Finance corporation (government sponsored with 113 offices);
   c) the central Bank for commercial and Industrial co-operatives (semi-government financial institution with 68 offices).

4.5.2.4 GENERAL ROLES OF SMALL BUSINESSES

Apart from employment provision or contribution to sales and GDP, several roles are played by small businesses. For a full discussion see for example Hollingsworth and Hand, 1979:3-7. Some of these will briefly be reviewed.

1. Technological innovation. Most small firms succeed if they are the first to have a technological break through or service (Hollingsworth and Hand, 1979: 3-7). In the U.K., the Radcliffe Committee (1959: 323) observed the innovative role of

> "the small firm and the private company which ...often...even today, bring new industrial developments to fruition. Many of the major advances in modern industry, as well as a most of minor advances, have been made by firms when they were still quite small; and this is no less likely to be true in future...

Different studies have shown that small firms obtain more inventions per £ of research and development (Lloyds, 1980 cited in Storey, 1982: 6). Rothwell and Zegfeld (1981 cited in Leyshon (1982: 61) also found that in the case of U.S.A and U.K.(but not Japan) small companies have a "particularly good record of radical innovation". Jewkes, Sewers and Stillerman (1958 cited in Swan, 1971:60; SBA, 1983:121-124) in their study of 61 important inventions and innovations of the Twentieth Century, found that over half of them came from independent inventors or small firms. Hamberg (cited in Swan, 1971: 6; SBA, 1983: 121-124) also found that over two thirds of the major inventions between 1946-55 were generated by small companies and independent inventors. SBA (1983: 121-124) also gives a good summary of other studies on innovations. These include Peck (1962) who found that 86% of 149 inventions, in aluminium welding, fabricating techniques and aluminium finishing was derived from small firms. Another was Gellman who showed that small firms with less than 100 employees contributed 24% of 319 product innovations by U.S. industries between 1953 and 1973. In 1982, he reported that 40% of 635 product innovations in 12 industries (4-digit level), were made by 226 small firms out of 583 (a small firms was classified as having under 500 employees).

2. Provision of a special service Small firms act as ancillary units where large firms find it unprofitable to operate (Hollingsworth and Hand, 1978: 3-7). This supplementary role has been found valuable in the case of Japan.

3. Provision of personalised attention Small firms give personalised service to clients where mass provision is not appropriate or where there is low profitability level (in medicine, law, family counselling) (Hollingsworth and Hand).

4. Filling a gap Local markets or very small unattractive areas to large firms need services of small organisations (Hollingsworth and Hand).

5. Provides useful service where diseconomies of scale exist Services of small firms are required where attractive markets are too small due to economies of scale (Hollingsworth and Hand).

6 Provides necessary competition U.S. Congressman Mitchel (1981: 8-9) while discussing measures taken by President Reagan in his economic recovery programme pointed out the useful role played by small firms in providing required competition for a viable economy. Economic concentration results in inflationary overcharges (9% of the GNP in 1981), which increases cost to consumers.

4.6 MYTHS ABOUT THE POWER OF SMALL FIRMS

The accomplishments of small firms discussed above have limitations. small firms complement the performance of large firms. Boswell (1973; Bannock, 1978: 7) described small business sector's elusive net benefits as a double edged sword because of its "capacity as a source of vitality and renewal" but also as a spectacle of "inefficiency and decay". Mkandawire (1983: 24) advised: "...too much faith in the informal sector may be misplaced". He referred to Sutcliffe who argued (cited in Mkandawire, 1983: 24): that if the small industry has to

> ...play a dynamic role in the industrialisation process...it will have to be because it is efficient enough to compete with other production [sectors] and not because it is an efficient sponge for urban employment.

It has for example been shown that although small firms generated more employment than large ones in the short term, they could not be counted upon to replace all jobs being lost by large firms.

The SBA (1983:87) reported that it was a misconception to suggest that all small firms generate new jobs. The truth was that only "a fraction of small firms creates all new jobs" that are generated by small firms. In the case of the US, a proportion of between 12 and 15% of firms or establishments has been consistently found to be true by research studies carried out by three institutions between 1969 and 1980.

Armington and Odle (1982, cited in SBA,1983:87) observed that the path of economic growth was one of

> violent growth (and shrinkage) in a minority of businesses, contrasted with stability in the majority of businesses

In another study, the Brookings Institute study, Armington and Odle (1982 cited in SBA, 1983: 87), found that this stability ratio was true for 2/3 of all businesses. These showed no changes in employment between 1978 and 1980. They therefore concluded:

> ...the fluctuation in employment growth and the addition of new establishments of large firms is the key to understanding job generation changes during a recession. In industries dominated by large firms, there appears to be small firm growth during recessions.

Other studies have also cast doubt on the methodologies used in calculating job generation (SBA, 1983: 85-86) due to differences of top-down or bottom-up approaches and time periods, resulting in differences of up to 30% in job creation (SBA, 1983: 87).

Other indicators such as survival rates do not favour the small firm. SBA (1983: 70) found that the probability of surving the first year was 75% for new small firms employing 1-9 people between 1976 and 1977. But it was 95% i.e. 20% more for large firms during the same period.

4.7 EVALUATION OF ZAMBIAN GOVERNMENT'S RECENT SMALL FIRM STIMULATORY POLICY

The fundamental issue to be resolved in evaluating the likely success of government's small firms policy and the objectives set out in the Third National National Development Plan (TNDP) is determining whether a mechanism exists for the process of persuading Zambians to form village industries and influencing them to start small scale businesses. In order to ascertain this, five issues may be raised.

First, is the question of whether such objectives would accomplish the required results since they appear to be divorced from either demand for entrepreneurs (and consequently their products) or supply of entrepreneurs.

Second, (related to the supply side), is whether Zambian grade VII school dropouts, for example, are superbrains who are capable of starting businesses (against the odds outlined in previous sections) that will mop up the massive youth unemployment.

Third, (related to demand side), is whether government fiscal and non-fiscal policies are attractive enough to induce the spirit of entrepreneurship. It is questionable whether anybody would for example start a business and/or locate it in a

rural area simply because the government wants deployment of labour intensive technology, or because it wants to reduce the urban-rural gap, or reduce youth unemployment.

The fourth point (related to the supply side), is whether there are adequate financial and trained manpower resources to implement the necessary changes, (such as providing both education and management training to various relevant audiences) Fifth, is whether the political philosophy with the objective of attaining humanism through socialism is conducive to enterprise culture which is associated with capitalism.

It should be made clear that no pretence will be made in attempting to study or evaluate the whole range of government policy or provide detailed answers to all the issues raised above in this research. The reasoning is simple. The issues raised by the nature of government policy are broad and each of them can be sufficient for complete research topics. Koh's thesis (1977), dealt with the relationship between education, and entrepreneurial formation and government policy in Japan. Curran's thesis (1978) was concerned with self-selection in entrepreneurship. Jones and Sakong (1980) wrote an entire book on government policy and entrepreneurship in Korea. Some of the issues in fact require political solutions.

However, solutions to urban youth unemployent entail relating government objectives to the fundamental reasons for the high rate of unemployment. The explanations for youth unemployent discussed above, can be boiled down to three (Aryee, Nov.,1981:2-4). The first, is to view it simply as reflection of the

imbalances in the overall supply of and demand for labour (regardless of whether it is self-employment or wage paid labour). The second, is built in the realisation that entry into the small-scale sector through self employment is neither free nor easy. The third interpretation relates to an assumption that in the informal and small scale businesses, there is always work to be shared through accepting lower wages. But Zambian youths prefer not to do so because they are supported by their relatives. Kanya (Oct., 1983:12-14) found that 92% were doing nothing and that 95% were supported by relatives (56% of these by parents). The interest of this study is in the first two explanations, i.e. demand-supply factors and barriers to entry in Self-employment (supply factor).

4.7.1 SUPPLY OF AND DEMAND FOR [illegible]

The first question raised regarding government's objectives being divorced from demand-supply factors, relates to two sides of the same coin: demand primacy and supply primacy. As discussed earlier, unemployment may arise due to imbalances of supply or demand for labour. Deficient demand especially in the small scale sector (where there is labour intensive and flexible wages) would arise due to (Aryee, Nov., 1981:2-4):

(a) limited markets (lack of demand for products);
(b) lack of access to resources (capital, equipment, working capital and raw materials); and
(c) stagnation in the growth rate of the sector.

As regards the supply primary, economists (who concentrate on policies to increase opportunities for profit as a way of increasing entrepreneurs), would like to convince everybody that the entrepreneurial supply is unlimited. There is always "an abundant reservoir of profit-responsive individuals in all societies" (Jones and Sakong, 1980:168). The problem therefore is to stimulate demand to "call forth the necessary talent [by altering] the environment and manipulate market incentives (that is shift the demand)" .

Zambia's problem however relates to both demand (economic, political constraints and lack of conducive environment) and supply i.e. lack of entrepreneurial talent. (Inadequate availability of entrepreneurs is partly historical due to discriminatory policies even in granting trading licences to ensure that other races did not compete with the whites) (Northern Rhodesia, 1947: par. 24-27; Northern Rhodesia, 1959).

4.7.1.1 SUPPLY OF ENTREPRENEURS

The second point raised above was the capability of grade VII school dropouts in forming businesses. Psychologists have concentrated on the supply side analysing inherent characteristics which motivate an individual to start a business. But sociologists have focused their attention on reasons for becoming entrepreneurs and social groups which are conducive to encouraging individuals to start businesses. Sociologists, like economist, would for example argue that primary school dropouts are capable of starting businesses which are required to create more employment. To them the issue boils down to the numbers of those who can form businesses when personal and environmental

factors are favourable. These are then translated into number of potential jobs.

In Zambia's case, availability of capable Zambians who can create businesses is equally critical. The solution does not lie in a simple formula of stimulating demand. Although there is no adequate data on small businessmen in Zambia, similar findings of barriers to entry such as capital, experience, age, and contacts have been reported for the informal sector (Kanya, Oct.,1983:47-60; Haan, July 1982:27; Aryee, Nov.,1981:2-4). If these are true for the simplest type of business ownership, there is no *'apriori'* reason to expect that these would not apply to the formal small firm sector.

The little experience of SIDO and Small-Scale Enterprise Promotion Limited (SEP) in promoting small-scale businesses in Zambia indicate that the act of starting a business is a lengthy, complicated, bureaucratic and costly venture requiring experience know-how and having contacts with and great influence on various bodies that "the whole process is beyond the reach of an ordinary small entrepreneur" (SEP,1984: 1-2). Legal fees for example are K1,000 (SEP, 1984: 1-2) while a building for many projects "would cost a minimum of K200,000 of capital assets less machinery which would take another K100,000" (SIDO, Sept., 1984:2). A service charge for a plot may cost a further K3,500. Yet almost all literature that advocate small businesses as an alternative to achieving full employment, boast about the little capital which is said to be as little as K3,000 to create one job (Chiselebwe, 1982:3). The question is whether a sum of K3,000 is little money to a grade VII school dropout, let alone the total cost of over K300,000.

Research evidence elsewhere shows that entry into the small formal scale sector through self-employment is neither 'free' nor easy contrary to the economists' view and the common belief among politicians in Zambia. It is limited by exceptional talents, skills, moderate level of education, experience, parental traits and personal attributes (Koh, 1977:22 & 77; Manousso, 1973; McClelland, 1961, 1965, 1969; Hornady and Aboud, 1971; Hornaday and Bunker, 1970). Lisimba (1984:2), a Zambian banker, also refers to a Labour Organisation's report on Japan's experience where as a rule 10 years of working experience is required for successful business start up.

Storey (1982:116-117) gives even more demanding requirements. In addition to working managerial experience in small firm, access to capital, high skills, he says that small businessmen who are likely to create more and long lasting jobs would normally have a high level of education, though not the highest. They would also be living in a prosperous area and would already be worthy.

Roberts and Wainer (1968:83) also report similarly, as regards education, on the success story of firms on Route 128 in the US. They found that successful small business managers for technological based firms, requiring high degree of technological transfer, had an average education level of a Masters degree and had worked in government's department or large high technological firms. Some had been allowed to work while setting up their firms, or used facilities belonging to such organisations to develop their products while employed in the organisations. Others were allowed to keep links even after leaving employment. Ferdows (1980:12-21) found (in the case of Iran) that:

> ... the key [to a] ... successful execution of a manufacturing start-up plan in a developing country [is] essentially [the] entrepreneur.

Although a viable project feasibility study is "a prerequisite [that is not] a guarantee".

In Zambia, employed people are not only denied financial assistance for start up but are also forbidden owning any business. Zambian government's view of expecting grade VII school dropouts to form businesses appears therefore to be misplaced.

4.7.1.2 [illegible]

In realisation of the personal qualities and requirements for start ups, some researchers such as Ettinger and Fromont (1985:55) suggested that efforts of entrepreneurial promotion, with the objectives of full employment, should be focused on organisation makers to reduce wasting resources. Jones and Sakong (1980:177-182) called for the dismantling of the traditional view of the monistic type of entrepreneur who must wholly be present or absent to perform his functions for a business to be successful. They instead advocated for an alternative concept of 'lenticular' type of entrepreneur. This type is viewed as "a lens that focuses the energies of others"(1980: 187). While accepting that management is different from entrepreneurship, they argued that formation of "new combinations of means of production" (p180) was the critical characteristic of an entrepreneur. Other seven functions which they identified as making up the entrepreneurial bundle, not only can any of them be done for the entrepreneur by markets or agents or both, but in principle all of them could be (see technical appendix 2A.4 - entrepreneurial function, for detailed discussion). Harvey (1988:72-82, cited in

Jones and Sakong, 1980:180) stated that delegation, enabled the entrepreneur to perform the function of 'gap filling' This also enables the expansion of "the effective entrepreneurial supply" . Jones and Sakong therefore concluded that the process of entrepreneurial development does not depend on increasing the supply of the monistic type of entrepreneur but on increasing the supply of agents and market mechanisms so as to allow success of the existing supply of lenticular entrepreneurs. The implication of their conclusion is that very small firms or new start-ups should not be assisted. This is made clear when Jones & Sakong (1980:182) state that in Korea the "first entrepreneurial act is a go-it-alone proposition. Most fail...". Then those who succeed are assisted.

The question of what type of entrepreneurs to concentrate on and how to identify them leads to the question of entrepreneurial personality which is dealt with in technical appendix 2A which discusses the theory of entrepreneurship.

4.7.2 DEMAND FOR ENTREPRENEURS: GOVERNMENT ASSISTANCE PROGRAMMES

Three measures of government aid can be identified. These are indirect assistance, the removal of discrimination and direct assistance or positive discrimination (Beesley and Wilson, 1981: 13; 1985: 118). In the case of U.K., refer especially to appendices A-F for the three types of aid corresponding to the periods 1948 to 1960, 1961 to 1970 and since 1971.

Zambia has no history of the three types of aid. SIDO Act and the guarantee scheme legislation were intended to remove

discrimination, but the effects have been to act merely as indirect assistance as will become clear in this study. Other discriminatory legislations against small business still exist. The creation of SIDO was aimed at positive discrimination in favour of small businesses as seen in the discussion of the functions of SIDO. In addition to various non-financial services outlined, eligible small firms were to receive additional incentives offered under the Industrial Development Act Cap 874, No. 18 of 1977.

4.7.2.1 LEGAL REQUIREMENTS FOR QUALIFICATION FOR INCENTIVES

In order to qualify for small scale enterprise category, a firm has to:

1) comply with the Trades Licensing Act provisions Cap 707;
2) obtain a manufacturing license if it is in manufacturing business;
3) have less than K250,000 or as determined ;
4) be approved and registered with SIDO.

Qualifying for a village enterprise required being located in a rural area, using labour-intensive processes and local raw materials. A village enterprise is however exempted from the requirements of the Trades Licensing Ordinance Act 1930 and Amendment Act of 1968 although they are required to comply with the Market Act Cap. 473. Four types of licences under the Trades Licensing Act are available (Mulwila, & Mushota, Nov., 1981: 18 & 19): a) the retail licence; b) the wholesale licence; c) The commercial travellers' licence; and d) the hawker, or pedlars or Stall holders licence. Licences under categories (a) and (d)

are normally issued to Zambians (under the 1968 Economic Reforms). The differences among the three types of licences under class (d), are that (Mulwila & Mushota, 1981: 20):

(i) a hawker operates from motorised vehicle;
(ii) a pedlar uses a bicycle and
(iii) a stall holder operates from a permanent small structure.

The process of qualifying is not easy as each law depends upon various other laws under different ministries or authorities. To obtain a trading licence requires getting a manufacturer's licence. This in turn needs possession of premises which meet the requirements of the Factories Act Cap. 514. This is an elaborate Act with provisions for safety standards, health and welfare of persons employed in such places; and requirements for examinations and inspection of plant and machinery as detailed in sections 18 to 64. The Factories Act in turn has to comply with requirements of Town and Country Planning Act Cap 475. This is again an elaborate Act dealing with requirements for preparation and submitting of building plans.

Most of the requirements, which were initially meant for large organisations, are beyond the capacity and comprehension of the majority of small businessmen. Complying with the above qualifies a person for incentives. For those interested in contradictions in existing laws, refer to Turner and Mulwila (June, 1982: 162-166) who have discussed contradictions between SIDO Act and others. These include Public health Act, Industrial Relations Act, Housing Statutory and Improvement Areas Act, Minimum wages/wages contracts and Conditions of employment Act, protective provisions of Employment Act and Apprenticeship Act.

4.7.2.2 INCENTIVES PROVIDED

4.7.2.2.1 INCENTIVES FORMERLY PROVIDED UNDER THE INDUSTRIAL RELATIONS ACT

Qualifying for incentives (as per SIDO Act sections 18, 22 and 23), available under the Industrial Development Act Cap. 674 No 18 of 1977 did not automatically guarantee any type of assistance forth coming. Qualifying simply meant being eligible to apply for incentives and loans from Development Bank of Zambia and those offered under the Industrial Development Act. These incentives were available to every firm (small or large) because (NCDP, 1979: 282):

> The act does not discriminate against any investors, parastatal or private, domestic or foreign.

The purpose of the Act was to, *inter alia* encourage direct investment into priorities to promote rural small-scale industries, export oriented industries. It also prohibited manufacturing "any product whether for sale in or outside Zambia" by any person without a licence obtained under the act (section 3(1)).

The act was initially intended to encourage foreign investment and transfer of technology in the country by large and medium sized companies. It was repealed in 1986 when field work was being conducted for this study because it was ineffective even for medium and large firms for whom it was intended. For detailed treatment of this subject see Mulwila & Turner (June, 1982: 158-161).

Reference to it was made to show its weaknesses as regards the incentives which were available to small firms although the SIDO Act states that all incentives in the Industrial Development Act are applicable to small industries. Discussion of the Act is also intended to show that while the new Act (Investment Act No. 5 of 1986) is better, there has not been much improvement in available incentives to small firms, other than exemption from income income tax for an initial period of five years and 50% for the next five years.

Under the Industrial Development Act, to be eligible for incentives, an enterprise had to be classified as a priority enterprise by the minister by satisfying at least two of the following criteria from group A and B (s.18):

Group A

a) maximum utilisation of domestic raw material;
b) Production of intermediate goods which are used by other industries; and
c) diversification of the enterprises industrial structure;

Group B

d) creation of substantial opportunities for permanent employment;
e) improvement of domestic industrial skills or fostering the development of domestic technology; and
f) promotion of industrial development in rural areas.

The incentives available under (s.20) for priority enterprises can be summarised as:

a) preferential treatment with respect to government purchasing (unless the tender price exceeded the lowest bid by 10%);

b) preferential treatment with respect to the granting and processing of import licences;

c) rebates on customs duty payable on:

(i) capital equipment (where labour intensive techniques were not viable);
(ii) raw materials (where not locally available);
(iii) intermediate goods (if they did not inhibit the creation of domestic value-added);

d) relief from sales tax in respect of the items described in paragraph (c) above;

e) relief from selective employment tax, for such period as the minister responsible determined (this is a form of punitive tax for expatriate employees earning more than K100 as of 1982);

f) relief from income tax in such manner and for such period as the minister could prescribe.

It is clear that the incentives were left at the prerogative of the minister and were too unspecific to be attractive to potential entrepreneurs. For example it was debatable what maximum use of raw materials was or the meaning of substantial permanent jobs before a businessman could claim. Further, it was questionable whether expecting a small firm to provide substantial permanent jobs before claiming was aimed at promoting the creation of new small firms. Still further, incentives provided under (b) to (e) could not appeal to small businessmen, particularly to potential entrepreneurs as they were not relevant since they could not apply for them before forming businesses.

Subsections (b) to (d) were not practical due to shortages of foreign exchange since 1975 even for large firms producing essential commodities. Some of these had been forced to close down (NCDP, 1979: 235). Others had been producing at 40 to 50% capacity (NCDP, 1979: 15) and even below 25% capacity (African Business, March, 1984: 58). Priority in TNDP was therefore given to these so that they could make "fullest utilisation of existing industrial capacities" (NCDP, 1979: 239). Kanya (1983: 32-34) reported that 72% of businessmen (large and small) viewed import licence and foreign exchange was the most critical problem. Mulwila and Turner (June, 1982: 158) reported that in February,

1983, Zambia had such a serious shortage of foreign exchange that "no import licences" were being processed. As seen earlier, the foreign exchange auctioning system introduced in 1986 under IMF, put small firms at a competitive disadvantage since they had little bargaining power.

As a result, SEP (May, 1984: 4) reported that the system provided for under the Industrial Development Act, had proved too difficult to "secure priority enterprise for any" of the companies they had promoted.

Exporting enterprises had to satisfy the minister that they exported "a substantial amount of its products" (s.21) before applying for incentives under this category, which were also vague. But for lack of space, they cannot be discussed. For the same reason, incentives for rural enterprises which applied "to any enterprise...located in a rural area" (s.23) can not be discussed in detail. But briefly, these were:

a) eligibility to apply for loans from the Development Bank of Zambia;

b) eligibility to purchase or apply for the rental of any factory or office facilities constructed in rural areas by Rucom, the Development Bank of Zambia...;

c) the use of Rucom's marketing and extension services;

d) the use of advisory services belonging to Rucom, the Development Bank of Zambia...;

As Mulwila and Turner (June, 1982: 159) also pointed out, what was being assured was eligibility. A businessman is interested in knowing <u>how much</u> he will save. In reality, both rural and urban were eligible to apply for loan. On eligibility to apply for a loan from DBZ, Mulwila and Turner (June, 1982: 159) referred to Parliamentary debates in March 1975 when L.

Mwananshiku, former Minister of Finance, had stated that of all the loans that the bank had advanced to enterprises, most had gone to "enterprises in urban areas". Further, the office space and factories from Rucom (NCDP, 1979: 248) promised to rural enterprises (at a fee) were in reality not available because "no substantial progress" had been made since its establishment well before 1972 (NCDP, 1979: 237).

It is therefore questionable how these incentives were viewed as being specifically aimed at attracting potential entrepreneurs into the small scale sector. The whole policy appeared to be too theoretical, over optimistic, redundant and contradictory to other laws.

SIDO (Sept., 1984: 2-3) observed that the assumption that the incentives offered under the Industrial Development Act would also "apply to small scale enterprises...was really a bad muddle".

The SIDO Act was therefore viewed as another piece of legislation, requiring one more application form and 'robbing' the small entrepreneur of his K5 required for registration. SEP (1984:5) observed and argued SIDO registration

> is of no real use to SSEs [Small-Scale Enterprises] since our laws, including the SIDO Act, do not recognise the special position of SSEs and their needs for assistance....The current legal and administrative framework...is very expensive, complicated and time consuming. The legal requirements of a limited liability company; the complex manufacturing licence forms and procedures; the complex and time consuming procedures of getting a plot of land; the requirements of obtaining licences etc., are far beyond the reach of an SSE both in terms of financial resources and knowledge...administrative procedures and the laws...

SIDO acknowledged the conflicting nature of legal requirements. In addition the whole process, particularly the Trades Licensing Act and especially the manufacturing licence process, was viewed as a (SIDO, Sept., 1984: 2-3):

> cumbersome procedure (which) is so frustrating that many intending entrepreneurs have been discouraged to venture into small business.... It is long, inefficient and costly both in terms of money and time wasted....At present, all things being equal, SIDO registration presents an unnecessary duplication.

4.7.2.2 FACILITIES AND INCENTIVES PRESENTLY OFFERED TO SMALL FIRMS

As of December, 1988, two incentives aimed at small scale sector were available under the Investment Act, No. 5 of 1988, which replaced the Industrial Development Act. This was again basically aimed at encouraging foreign investment and exporting enterprises (sections 4, 8, 9, 14(11) and (3)). There was however, a provision for small scale industries. They were exempted from paying income tax for the first five years of their operation and to pay 50% of income tax for the next five years. The second incentive was the Central Bank of Zambia (Credit Guarantee Scheme) Statutory Instrument No. 52 of 1987. The Central Bank undertook to guarantee loans advanced by commercial banks to small businesses.

4.7.2.2.1 The Investment Act 1988

Assistance provided under the Investment Act was divided into three categories. The first was composed of facilities for all exporting enterprises. The second was common incentives and the third was specific incentives for certain groups of qualifying enterprises.

1. Facilities for All Exporting Enterprises

As with the repealed Industrial Development Act, the facilities offered under the investment Act (s.23) were not specific to be attractive to potential small businessmen. These needed assistance in start up. The facilities offered were:

a) retention of such percentage of their foreign exchange earnings, and the utilisation for such purposes and on such terms and conditions, as the Finance Minister may from time to time determine;

b) preferential rate of income tax as Parliament may from time to time provide;

c) access to any foreign exchange revolving fund which may be set up to promote exports from Zambia; and

d) access to any free zones which may be set up in Zambia.

Space does not allow analysis of these facilities. But it is clear that they are not definite, all of them are dependent on some other factor. A businessman will not invest his capital where the uncertainties and hence risks are very high. For example incentive (a) is at the discretion of the Minister while (b) depends on Parliamentary outcomes (with no present rate). Likewise (c) and (d) depend on activities being "set up" and there is no guarantee that they will.

2. Common Incentives to all Enterprises

In order to qualify for common and specific incentives, an enterprise had to apply to the committee for a certificate of incentives (s.25) after meeting the following criteria (s.24) (which were clear compared to those offered under the repealed Industrial Development Act):

a) it is an exporter of non-traditional products or services which result in foreign exchange earnings in any calendar year of at least 25% of its total gross earnings for that year; or

b) it is an enterprise which uses a high proportion of local raw materials and resources (including labour) amounting to more than 25% of its total annual operating costs; or

c) it is an enterprise which has more than 85% of its labour force working in facilities located in rural areas; or

d) it is a small scale enterprise or a village enterprise registered under the provisions of the Small Industries Development Act, 1981.

An enterprise holding a certificate of incentives is entitled to the following incentives starting from the date of commencement of operations (or of receiving the certificate which

over is later):

a) for a period of five years an annual deduction of 50% of the total salaries paid to Zambian manpower employed in the enterprise (except employees receiving 5 times the minimum wage for a general worker); and

b) for a period of five years, full exemption from tax on dividends; and

c) for a period of three years, exemption from payment of selective employment tax (chargeable to companies employing expatriates); and

d) for a period of ten years, an annual deduction of 50% of expenses incurred on training Zambian employees and spent on research and development

3. Specific incentives to certain categories of enterprises

Additional incentives are provided for certain exporters who qualify under (a) above (s.27). These will not be discussed for lack of space. Another relevant group of additional incentives provided to those who qualify under (c) for rural enterprises is to pay the following income tax (s.28):

a) 33% for the first five years of operation for companies;

b) 50% for the next five years of operation for companies;

c) 66% for the next five years of operation for companies.

A small businessman registered under SIDO Act benefits as follows for the specific incentives (s.29):

a) Exemption from income tax for the first five years;

b) Payment of 50% of income tax "applicable to him" during the next five years.

It is clear that out of the three types of assistance provided, most small businessmen would only benefit from specific incentives of exemption from income tax for the first five years and payment of 50% during the next five years. If they can manage to start off. The common incentives are in practice

applicable for foreign investors. The rural incentives do not offer much attraction since an entrepreneur would in fact be better off by locating in urban area where better infrastructure is available.

Although the present Act is better than the previous one, it is doubtful whether it will stimulate many business start ups. It may help those who can manage to start off.

4.7.2.2.2. Bank of Zambia (Credit Guarantee Scheme)

The credit guarantee scheme sponsored by the Central Bank which was under consideration during field work for this study was finally enacted in February, 1987.

The qualifying types of enterprises are three (s.3) namely (a) small scale enterprises as per SIDO Act, (b) enterprises engaged in manufacturing or (c) engaged in a sector approved by the Bank of Zambia (BOZ). The guarantee covers 70% of the amount on which default has occurred or the amount guaranteed (whichever is lesser), up to a maximum of K100,000 (s.12(1)). The guarantee would cover a maximum period of ten years for loans repayable over a fixed period and two years for other forms of loan (s.4). The approved institutions were 12 (9 banks, SEP and Zambia State Insurance Corporation), see table 4.1.

An institution applying for guarantee on an approved form (s.13) is required to meet three conditions. First, it should confirm the viability of the proposed project from a technical point of view and that a reasonable return may be realised from the investment. Second, that the small scale enterprise (SSE) is

registered with SIDO or VIS. Third, that SIDO or VIS has recommended advancement of the guarantee (s.14).

Invocation of guarantee by an approved institution calls for many requirements before it can benefit from the scheme. These include (s.17):

1) satisfying BOZ that "it took all reasonable steps a prudent lender would have taken to procure repayment of the advance" (s.(1)).

2) notify BOZ on an approved form when it becomes apparent that the small enterprise is bound to default including all correspondence with SSE;

3) continue to make reasonable effort to recover the amount in default from SSE including disposing any security;

4) after submitting the claim and upon effecting payment by BOZ if satisfied, the amount should not be deposited to the account of SSE, but the approved institution should continue to exercise necessary dialogue in recovering the amount in default in all possible ways "as it might have exercised if no guarantee had been given "by BOZ (s.(7));

5) any amount recovered by the institution for which it "had invoked the guarantee" will be shared *'pro rata'* between BOZ and the institution;

6) the balance of the amount in default cannot be written off without approval by BOZ.

Further, the institutions are required to submit advances made every six months and returns every quarter of a year. A total of 10 forms are required. It is apparent that the procedure is so cumbersome, standards too demanding and the whole process too costly that private institutions would not bother unless they are definite. That is, if they could have done it without a guarantee. This therefore makes the whole scheme futile. The scheme would be very useful if an institution specialising in small business, with a non-profit motive, was set up and was one of the approved institutions. It would be more committed than commercial banks.

Effectiveness of Bank of Zambia small business guarantee scheme as a source of finance for small business start up was a subject for investigation in this study. It was aimed at small business supporting agencies and local councils. It is discussed in chapter 16.

Table 4.1 Approved Institutions for BOZ Guarantee Scheme

1.	African commercial Bank Limited
2.	Bank of Credit and Commerce (Zambia) Limited
3.	Barclays Bank of Zambia Limited
4.	Citibank (Zambia) Limited
5.	Grindlays Bank International (Zambia) Limited
7.	Meridien Bank (Zambia) Limited
8.	Small Scale Enterprise Promotion Limited
9.	Standard Chartered Bank (Zambia) Limited
10.	Zambia Agricultural Development Bank
11.	Zambia National Commercial Bank Limited
12.	Zambia State insurance Corporation Limited

Source: Statutory Instrument No. 52 of 1987 First Schedule

4.7.3 ADEQUACY OF FINANCIAL AND MANPOWER [redacted]

Apart from the issues of demand / supply, ability of grade VII to form viable small businesses and incentives which have been discussed above, the last two points raised (in section 4.7) regarding government's small business policy were availability of financial and manpower support, and political philosophy or enterprise culture. A brief comment on the first issue is done now while the next section very briefly looks at the enterprise culture.

It has been argued above that resources in Zambia are scarce and unfavourable enterprise culture exists. SIDO's total resources for its first year of operation was a grant of K110,000 (£44,000) (SIDO, 1983:2). In his annual report, the Director pleaded saying although

> "the potential for small-scale industries is quite high in Zambia, a lot will also depend on the support we can get in terms of finance as well as other material ...support".

The following year, SIDO'S grant was K1175,000 (SIDO, 1984: 8). Yet SIDO's functions as seen in the preceding sections are wide ranging. It is clear that the funds are inadequate.

4.7.4 POLITICAL PHILOSOPHY VERSUS ENTERPRISE CULTURE

Leadership code as a hostile enterprise culture was discussed in the last chapter. Reference was also made to the probable contradiction between humanism which in theory allows a mixed economy. It is apparent that the type of political and economic systems Zambia should adopt has not been made clear by the government. It is for example, stated that the TNDP was formulated in conformity with the ruling party guidelines, attaining the "objectives of self-reliance and socialism within the national philosophy of Humanism" (NCDP, 1979:21). This implies socialism is an attainable goal. But it is again stated that "...Socialism is an instrument for building a humanistic and classless society" (NCDP, 1979:23).

Creating a classless society appears to be in dissonant with the very basis of traditional humanism, because traditionally, Zambia has never been a classless society. Some tribes dominated others, Paramount Chiefs were viewed differently in terms of political and economic power and were accorded different respect from ordinary chiefs, from chiefs' advisers, from village headmen and from other well to do members of a community. SIDO (1983 a: 4) has assured potential small businessmen that

> ... the small-scale sector is a free sector, where Zambians are invited to set up their own private and co-operative units ... .

As recent as 1985, SIDO's Director Dr. Ngandwee (June, 1982: 143) again stressed this 'guarantee' that "SIDO protects and promotes freedom of entry into any industry by an entrepreneur" [emphasis mine].

Despite all these documented assurances of a mixed economy, it appears socialism is not merely a means of attaining humanism in a mixed economy, but an ultimate goal as stated in TNDP because (NCDP, 1978: 415):

> ...effective transformation of the present mixed economy into a socialist economy will require expansion and further strengthening of the public sector [emphasis mine].

This confusion and uncertainty instils fear in some businessmen of a possible nationalisation of their firms (Kanya, 1983:36). This can greatly constrain growth of existing businesses and the creation of new firms. This may result in more unemployment. Therefore this type of environment is not conducive to promotion of small-scale business creation.

4.8 FUTURE OF SMALL BUSINESSES

The rate at which small firms grow, particularly indigenous ones in developing countries like Zambia will slow down in the absence of conducive environment. But small firms will continue existing and as Storey (1982: 42) said they need not compete with one another. They can co-exist, small ones acting as ancillary units as is the case in Japan. Marshall (cited in Steindl, 1945: 3) stressed this point when he stated that the business field is like a forest where

> small firms exist side by side with big ones and not only (do they) exist, but even grow.

4.8.1. FACTORS ATTRIBUTED TO [illegible] EXISTENCE OF SMALL BUSINESSES

Factors that have been attributed to the continued existence of small businesses can be summarized into six main ones (see Steindl, 1945: 59-62; Phillips, 1951: 8-11; Davies and Kelly, 1972: 63-73). The basic factor that explains the continued existence of small firms is market imperfections which lead to the first three factors.

1. Rate of Growth of Large Firms

The first factor is the rate at which large firms themselves are able to grow (Steindl, 1945: 59) through acquisition and accumulation of capital either within an enterprise or through investment of distributed dividends by large shareholders because the process takes time. Penrose (1960 cited in Davies and Kelly, 1972: 74-75) stated that this was particularly true where growth in an economy increases demand for products which large firms can not meet due to limited resources and hence "...can not prevent the entry of small firms".

2. Imperfect Competition

Imperfect competition favours local markets due to both rational and irrational factors. The later are sentimental inclinations by consumers to small businessmen's products (due to habit, ignorance of relevant factor simply laziness). The former include limited markets due to:

a) Economies of Scale such as technical and marketing (e.g. transportation) where economies of scale are lacking to attract large firms. Local markets can therefore better be served by small firms (Davies & Kelly, 1972: 63-64).

b) **Fluctuating demand and raw material supply** encourage small firms which are flexible (Davies & Kelly, 1972: 65). Large firms can overcome these weaknesses through sub contracting but the problem is that such subcontractors become reservoirs for large firms spare capacity and become vulnerable.

c) **Widely dispersed raw materials** resulting in high transportation costs may encourage local and consequently small scale production (Davies & Kelly, 1972: 64-65). Large scale is possible if transportation costs can be over come by production economies of scale and concentrated production.

d) **Risk and uncertainty** in markets which are subject to frequent changes in demand especially where no major technological advantages exist favour small firms according to Robinson (1931: 49-50 cited in Davies & Kelly, 1972: 71). This is because small firms are flexible, quick and decisive since usually one or a few individuals are involved contrary to bureaucratic, long chain of communication, co-ordination and decision making in large firms. Recent developments in information technology and processing "are reducing" these disadvantages (Schwartzman, 1963: 295-296 cited in Davies & Kelly, 1972: 71).

e) **Localisation** of an industry enable small firms to (Florence, 1948: 52-53 cited in Davies & Kelly P. 66):

(i) utilise through one local merchant;

(ii) economise through fuller use of specialists and machinery under one roof by specialising "next door to another one"

(iii) to obtain large economies of scale related to auxiliary

services such as repairs and tooling through "simple locality with specialised organisation near the spot, which can serve in common the multitude of local plants.

f) **Service and the Personal Touch** which can be good, reliable, precise and personalised. Florence (1953: 64 & 65 cited in Davies and Kelly, p. 69) stresses small firms

> "...promise delivery dates, however unreasonable and keep their promises;...attend to customers' complaints, however wrong headed..."

thereby building goodwill. These cannot easily be matched by large firms with their bureaucratic structure. Cross (May-June, 1967: 174) adds that dealing with chief executive of a company develops "...more confidence in the quality of the service..."

3) **Oligopolistic Market**

Large firms tolerate existence of small ones as a matter of policy to disguise the extent of monopoly (Steindl, 1945: 60; Davies & Kelly, 1972: 76). Gains by encroaching on this small share of the market may be limited or such a policy prevents government's intervention since the industry is seen to have many firms and no monopoly (Phillips, 1951: 166). Davies and Kelly (1972: 76) presented a stronger argument of small firms being high margin cost producers in some industries. They earn only a normal return and industry profit is limited. Driving out small firms would invite new entries if profit is at maximum, thus gaining nothing.

4) **Separate small Businesses**

Presence of separate "small business industries" which are more or less sheltered from the competition of other industries because of small market, preclude large firms (Phillips, 1951:8).

5) Organisational Size and Productivity Small firms continue existing due to possible high productivity resulting from less class conflict and industrial conflict (Marx cited in Davies & Kelly, 1972: 67). Davies and Kelly refer to

> considerable empirical evidence [which] suggest that industrial relations as measured by incidence of strike action deteriorate as size of the firm increases.

These include the works of Cleland (1955: 62), Revans (1959) and Ingham (1970:22) which reported that small firms promote workers satisfaction and morale measured through absenteeism. Dewhurst (1980: 11) also referred to other studies which reported that problems are settled amicably, employees are happier, highly motivated and had a much enhanced feeling of belongingness. But he adds that recent studies have indicated that the high motivation could be due to the mostly high motivated people who enter the small business field - pushers as opposed to sleepers in the large firms.

6) Labour Market Imperfections

a) Lower Salaries Offered to Employees enable small firms to be in an advantageous position over large firms. Davies and Kelly (1972: 72-73) refer to empirical findings by the Ministry of Labour in two different studies in 1959 (Min., of Lab., Gazette, Apr.,) and 1966 (Min., of Lab., Gazette Dec.,) which concluded that employees worked longer hours for lower pay.

b) Love for entrepreneurship referred to by Steindl (1945:82) as the 'gambling' attitude of small businessmen who accept unusually high risks for low remuneration. They sacrifice salaries they could command in order to be their own bosses. This is most apparent during periods of high unemployment, particularly secular when they cling to their businesses. This facilitates the next factor.

c) Absence of alternative employment opportunities encourages new entrants into business ownership, hoping against hope to succeed.

d) Availability of unpaid family labour. use of home as a place of business, willingness to accept low return allow small businesses to continue existing.

4.8.2 FORCES THAT MAY REDUCE THE POPULATION OF SMALL BUSINESSES

Unfavourable enterprise culture, economic and market structures may diminish the number of small businesses. The first has already been dealt with in section 4.7. Economic and market structure forces can be summarized into 9 points.

1. Large economies of scale can lead to displacement of small enterprises resulting from technological changes (Phillips, 1951: 11 & 188). But as seen above, economies of scale resulting from oligopoly allow small businesses to exist (Phillips, 1951: 188).

2. Increasing size of limited markets. usually the province of small size have recently lost such advantages because of increases in markets for products and improvements in transportation (Davies & Kelly, 1972: 80). This enables balancing of technical economies of scale in production with transportation. General economic growth regardless of the speed also enlarges markets.

3. Increasing optimum size of the firm through increased plant size, measured in output terms makes it difficult for small firms to exist (Davies & Kelly, 1972: 81).

4. Structural changes in related markets resulting from development in such industries have major impacts on a number of related industries (Davies & Kelly, 1972: 83).

5. Poor Capital Structure of the small firm resulting in (Phillips, 1951: 188, 183):

1) greater dependency on short-term Capital (trade credit, with greater risk);

2) higher cost of borrowing;

3) inadequacy of its capital

6. Financial and credit policies of government and financial houses towards small firms may also hamper the growth of small firms (Davies & Kelly, 1972: 85).

7. Government Policy is Positive as Regards Promotion of small firms such as changing the structure of industry through state participation, and also taxation have contributed to the decline of small firms (Davies & Kelly, 1972: 85). Refer to section 4.7 for the full discussion of government policy in Zambia.

8. Inability to compete for foreign exchange to buy the necessary inputs and machinery in the case of developing countries such as Zambia result in declining small business population.

9. Lack of good management and know how in necessary procedures for overseas purchases in the case of Zambia may lead to diminishing small businesses.

Before presenting entrepreneurship theory, useful in identifying the type of people promotional efforts should be focused, it is now appropriate to pick up the issue of small firm definition.

SECTION III: RESEARCH DESIGN AND METHODOLOGY

CHAPTER 5 - METHODOLOGY: METHODS OF ADMINISTERING THE SURVEY PROJECT AND FIELD WORK EXPERIENCES

5.1 INTRODUCTION

The three aims of this chapter are first to describe the research design selected and reasons, second to present the statistical techniques used in analysing research findings and third to discuss the data collection procedures actually used and fieldwork experiences. Due to lack of space, the research design and statistical techniques are merely introduced in this main chapter, but are fully examined in chapter 5 appendices 5A1 and 5A2 through 5A4 respectively. The main body of chapter 5 focuses on the methods used in the field, data collection experiences and problems encountered.

5.1.1 TYPE OF APPROACH TO RESEARCH AND RESEARCH DESIGN

The aim of research design was basically two-fold. First, to explain the type of research design selected, and the factors influencing both the choice and type of data required. Second to present the alternative methods that were possible in collecting the information and justification for adopting particular methods. This also required clarification of the scope of primary survey. That is description of populations and sampling methods, sampling design and alternative survey methods chosen and reasons for doing so.

Type of research: There are two extreme types of approaches to research: theoretical and action oriented. These are further divided into pure basic, basic objective, evaluation, applied, action and the new 'paradigin' research (Bennet, 1983: 34-37). This research study was concerned with basic objective research. It aims at providing an answer to a general problem of how new knowledge may be applied. For explanations of other types, see chapter 5 appendix 1 (5A1).

Factors influencing research design: Since this research study was concerned with a general study of the performance of small business firms and not a particular problem within an enterprise, correlational designs or cross-sectional studies was determined to be the most appropriate. It has more external validity than internal validity. It is one of the five types of quasi-experimental designs. Correlational design aims at studying the property-disposition relationship through a field survey. It was the most suitable since the study sought to find out associations, if any, between dependent variables and the independent variables such as incentives, education levels, experience or age of businessmen among many variables. For discussion as to why experimentation and other quasi-experimental design methods were found unsuitable refer to chapter 5 appendix 1 (5A1).

Required performance data: Although the research used both primary and secondary sources of information, the main research used primary data. The reason being lack of agencies (in Zambia) to provide small business data on the variables of interest. For a full discussion of required performance data, refer to chapter 5 appendix 1 (5A1).

5.1.2 ALTERNATIVE METHODS OF COLLECTING THE INFORMATION

There were, three methodological problems to be resolved as is common in surveys: (a) from whom the information was to be collected; (b) the appropriate methods in doing so; and (c) how the processing, analysis and interpretation of the data had to be done (Moser and Kalton, 1971:53). The third issue is dealt with in chapters 6 through 10. The first two issues are addressed to in details in chapter 5 appendix 1 (5A1). But it is important to indicate briefly the scope of primary survey and the statistical techniques adopted, which were determined before data collection.

The target population was <u>private</u> small and large manufacturing businesses. But it was essential to contact a second survey population (23 key institutions of selected survey populations) which support small businesses to obtain information about the later. These were SIDO, SEP, BOZ (small business section) and headquarters of ten banks, existing in the country at the time. The third major survey population was the SBIS students and graduates (potential small businessmen).

The sample was a subset of the target population actually selected to provide required information. The sampling unit for business firms was a small and a large manufacturing business establishment in a town. For the procedures used in determining the sampling unit, refer to chapter 5 appendix 1 (5A1). In the case of SBIS respondents, the sampling unit was a first, second, third, or fourth year student; or graduate from Copperbelt University from 1980 to 1985. Refer to chapter 5 appendix 1 (5A1) for reasons for selecting them.

The three types of sampling units were used instead of one for two basic reasons. The first was the underdeveloped nature of the small business field in Zambia as explained in chapter 2.4 (on the need for investigation). The second was the need to analyse the small firm as an integrated, identifiable separate unit and how it is affected by other factors. This type of approach is lacking in many social science research and particularly in the small business field. As other researchers have realised, a small business is a "complex social reality". Curran (1978:49) has for example noted:

> A single research strategy which seeks data from the focal group alone cannot adequately explore [emphasis mine] this complexity or adequately test hypotheses concerning social relations with others.

Dewhurst (1980:5) and Miller (1980:30) criticise studying small businesses across sectors and advocate for the need to examine single identifiable sectors in order to achieve serious debate on the creation of employment by small businesses.

There was therefore a need to get a complete picture regarding stimulatory policies and practices in Zambia, especially that there is no basic research in small business for references on fundamental issues such as small business banks' lending policies, types of facilities available from local authorities and promotional programmes of SIDO and SKP. The SBIS attitude survey was helpful in understanding or knowing graduates' predispositions towards business formation as career alternatives and in determining whether offering small business options as suggested by Easton (1977:44) would be instrumental in this process. Refer to chapter 5 appendix 1.4.2 (5A1.4.2) for detailed discussions and limitations of attitude scales to directly predict "overt behaviour" (see also 5A2.8).

5.1.3 STATISTICAL DATA ANALYSIS APPROACHES

The type of research design normally determines the type of data that is collected which in turn determines the statistical techniques to be applied. There are three basic types of data available (which were collected also for this research study) around which variables were generated:

1. Textual data
2. Categorical data and
3. Quantity data.

Refer to chapter 5 appendix 2 (5A2) for their explanation and their relationship to the variables understudy. The two basic types of variables, categorical and quantity, were generated from the three types of data. Their subclassifications which were found relevant were nominal, ordinal for the former; and discrete and continuous for the later. Textual data was also used before and after transforming it into categorical data.

Since the objectives of the research design and data varied, the purposes of the statistical analysis and statistical techniques determined suitable had to differ. (see chapter 5 appendix 2 (5A2) for detailed descriptions. The major ones were:

a) Chi-square test (X^2- test)

b) Differences between proportions and means (Z- tests).

c) ONE-WAY analysis of variance (ANOVA with its F-statistic).

d) Student's t test

e) Factor Analysis (using Bartletts test of sphericity and KOM).

f) Likert scale.

g) Content Analysis

5.1.4 INTRODUCTION TO FIELDWORK EXPERIENCES AND RESPONSE RATES

The main field work was undertaken over a period of seven Months between the 1st of July, 1986 and the 14th of January, 1987 in the two main provinces of Zambia, Central Africa. The entire field work was however completed in nine Months because part of the graduate postal questionnaire was carried out after returning to the U.K., among graduates who were outside Zambia at the time of conducting the main field work.

A total of four surveys were conducted, using questionnaires. One was a self-administered postal questionnaire aimed at students of the School of Business and Industrial Studies (SBIS) at the University of Zambia, Ndola Campus (now the University of Copperbelt). The second was also a self-administered postal questionnaire, sent to former graduates of SBIS who graduated from 1981 to 1986 inclusive. The third, the most demanding one in terms of cost and time, was a structured personal interview. It was conducted among businessmen in the three most important towns in Zambia (Lusaka, Ndola and Kitwe). The fourth was an unstructured personal interview questionnaire aimed at directors, managers and civic leaders of actual and potential small business supporting organisations. These were divided into:

a) government representatives i.e. Ministry of Commerce, Bank of Zambia Small Business Department;
b) government and private small business supporting agencies i.e. SIDO and SEP;
c) financial organisations i.e. commercial banks;
d) Urban District Councils.

On the whole, response rates were good. Out of 231 student questionnaires, a total of 181 were returned duly completed. This represented a response rate of 78%. In the case of graduate questionnaire, a total of 254 out of 501 respondents or a response rate of 51% was achieved. A regards the businessmen questionnaire, the overall response rate was 55% in the three towns (218 out 396). This was distributed as follows: 49% for Lusaka, 60% for Ndola and 62% for Kitwe. The overall response rate for small businessmen potential and actual supporting agencies was 73%. These were:

a) 2 out 3 (66%) government representative organisations, namely, the Ministry of Commerce and Bank of Zambia's Small Business Guarantee Department;

b) 2 out 2 (100%) government and private small business supporting agencies;

c) 6 out of 10 (60%) commercial banks that existed in Zambia. These were Barclays Bank, Standard Bank, Grindlays Bank, Citi Bank, Bank of Credit and Commerce and Zambia National Commercial Bank;

d) 7 out of 8 (88%) major councils in the Urban areas, the two provinces where small businessmen questionnaire was conducted. These were: Lusaka Urban District Council, Ndola Urban District Council, then Luanshya, Kalulushi, Mufulira, Chingola and Chililabombwe District Councils (see map on chapter 5 appendix 5 Exhibit 4 i.e 5A5.4)

5.2. PRE-PILOT STUDIES

The three structures questionnaires were all pre-piloted among 5 members of staff in the department of Business and Management Science at the University of Stirling, Scottish Enterprise Foundation, one external department and among fellow postgraduate students in the U.K. Their useful comments were taken into account when preparing the pilot study questionnaires to be conducted in Zambia.

5.3. UNDERGRADUATE QUESTIONNAIRE

5.3.1. INTRODUCTION

Initially it was planned to personally interview a representative sample of undergraduates (excluding first year students) while they were on the campus. But as the University was closed longer due to student disturbances, it was decided to send a postal questionnaire to all students to increase the number of cases sufficient for analysis. First year students were ultimately included because they had completed one academic year of study by the time the questionnaires were conducted. Their one year's experience at the University was deemed adequate for purposes of this study. A total of 182 completed questionnaires (out of 234) were returned. This represented a response rate of 78%.

5.3.2 PREPARATION OF THE SAMPLING FRAME

The sampling frame used was composed of four SBIS lists of all registered undergraduates in their first, second and third year in the school. Fourth year final students were regarded as graduates in the final questionnaire although they had initially been included among undergraduates when the pilot study was conducted. The total population of the undergraduates was 248. However, a total of 17 students were excluded from the postal questionnaire, leaving a final reduced population of 234.

Of those excluded, 9 were part time students or those who were on leave of absence whose contact addresses were not easily available. They were regarded as different subgroups from full time students. The remaining 8 students who were full time students were left out because they had been selected as research interviewers in the businessmen questionnaire of this project.

5.3.3. ADMINISTRATION OF UNDERGRADUATES' PILOT STUDY

A pilot study was conducted for the undergraduate questionnaire to a sample of 54 students out of a net population of 319. A sample of about 50 was deemed sufficient to enable meaningful analysis to be done. However, this was approximated to a sample of 54, representing a sampling fraction of 54/319 or 17%. It was referred to as a net sample because it had excluded part time students or those who were on leave of absence. But it had included fourth year final students as the questionnaire was

prepared before the closure of the University. Since the University was closed longer than usual, the questionnaires which were intended to be administered personally to the respondents upon their return from holidays, were sent to them using their contact addresses from the Dean of Students Office. Lists of students, from first year to fourth year, compiled after student registration by the School of Business and Industrial Studies (SBIS) were used as sampling frames.

The purposes of the pilot study among others were:

1) to test the questions and the entire questionnaire;
2) to find out whether questions and terms were clearly understood;
3) to determine whether statements on attitude measurement were discriminating;
4) to discover whether the spacing was adequate for open ended questions;
5) to learn whether some questions should be excluded or new ones included;
6) to have an estimate of the response rate.

5.3.3.1. **Pilot Sample Size and Selection**

The sample size used was 54 out of the net population of 318 decided upon from above. The sampling interval was found to be 6 determined as follows applying the sampling fraction decided upon above:

Sampling fraction = f = n/N

Sampling interval = K = 1/f

Where: f = Sampling fraction i.e. the proportion of the population size to be interviewed.

n = Sample size determined to be interviewed.

N = Net total population size.

K = Sampling interval i.e. the Kth person to be selected for interview.

Since n = 54 and N = 319

f = n/N = 54/319 = 17/100 (or 17% of the net population would be sampled).

K = 1/f = 1/n/N

$$= \frac{1 \times N}{n} = \frac{1 \times 319}{54} = 5.9 \sim 6$$

i.e. select every 6th person.

In order to determine the first respondent to be selected to begin the selection process, numbers from 1 to 6 were written on pieces of paper. Then they were shuffled and a random selection done by picking one paper. The number on the paper was 3. Hence the selection process started with respondent no. 3 on the list, a first year. Then the next person picked was the 6th one after respondent no.3 i.e. the ninth respondent on the list. This procedure was continued by choosing every 6th person until the whole sample of 54 had been elected.

A questionnaire with the researcher's introductory letter (Exhibit 5A5.6), a Dean's letter soliciting for their support and a self-addressed stamped envelope were sent in each mailing on 20th June. The introductory letter outlined the purpose of the project and the importance of the information the respondent's valuable participation would provide. It also requested them to return the questionnaire after completing it within one week after receiving them, indicating the dead line.

5.3.3.2. Pilot Study Analysis and Lessons

A total of 20 respondents replied by the end of a second week, representing a response rate of 37%. By the end of the third week, 31st August, 1988, only a total of 25 or 44% response rate had been achieved. Some undelivered mail was returned.

There were three basic implications. One was that if a higher response rate was to be achieved, a longer period for the cut off date line was needed. Another was that a second reminder would have to be sent in the final questionnaire. The last one was that a larger sample was needed if enough cases for analysis would be received. Information was also received that the University would not open early as usual.

Quick analysis of responses also revealed several aspects. First, the fourth year final students were to be considered as graduates, not students because some questions relating to their career plans and working in small business as well as business ownership did not make sense. This was so because a great

majority had started working. Some questions were also revised as they appeared to be unclear. Some statements relating to factors that might influence students to work in small or large firms were revised. Others were dropped as they did not discriminate among the responding students.

Initially, the questionnaire was to be personally administered to a sample of students while on the campus. But considering that the University was to close longer than normal, and in realisation of the low response rate, it was decided to send a postal questionnaire to all of the students. It was feared that if a sample was made, the response rate would be low due to unreliable addresses. This would in turn result in too few cases which would not be usefully analysed using statistical techniques. The reasoning for this was based on an assumption that if the pilot response rate of 44% materialised, this would provide a total of 102 cases. As there were many variables in the questionnaire, each with several alternative answers, up to as many as 7, this would give an average of 15 cases falling in each category. This would not even be adequate for meaningful statistical analysis. Results from such a study would hardly be believed. It was therefore thought that investigating the whole population would increase the number of cases and the precision of estimators.

5.3.4. FINAL UNDERGRADUATE QUESTIONNAIRE

After the questionnaire was revised, the final version of the undergraduate questionnaire was therefore a postal self-administered questionnaire, sent to all students who were in their first, second and third year in the academic year 1985/86. Fourth year final students were therefore excluded as they were regarded as graduates. This action reduced the student population from 319 to a net population of 231. Questionnaires were sent to all of them. A total of 181 students ultimately responded representing a response rate of 78%.

5.3.4.1. Administration of the Undergraduate Questionnaire

The questionnaire was sent to all 231 students, using addresses from the Dean of Students. The support letter from the Dean (Exhibit 5A5.5), the researcher's own introductory letter (Exhibit 5A5.7) and a self-addressed stamped envelope, for the convenience of respondents when returning, were enclosed together with the questionnaire.

The respondents were asked to reply within one week after receiving it (posted on 4th October and dead line was 20th October) (see Exhibit 5A5.7). This in effect meant that about three weeks were allowed. One week for the mail to reach the respondent, another week within which to responded and the third week for the mail to reach the researcher. A longer period was decided against because of a greater possibility of putting away and forgetting about the questionnaire by the respondent if the period was too long. The response after the cut off date was

122 out of 231 or 53% response rate. This accounted for 87% of the final responses of 181.

A reminder letter was sent about three weeks after the cut off date (Exhibit 5A5.8). The urgency of the matter was emphasized. Self-addressed stamped return envelopes were again enclosed. The total second mailings were 95. This included some respondents whose mail had crossed. The same three week period was allowed for responding. The total second response was only 25 or 11% of the population but accounting for 14% of all responding students. The second mailing included a few mailings which had continued trickling in until the end of December, 1986.

As there were fewer corrections relating to the designing of the pilot questionnaire, but more reductions of the number of questions, the pilot study responses were included in the final analysis. This represented 15% of the population or 19% of the responding students.

5.4 GRADUATE QUESTIONNAIRE

5.4.1 INTRODUCTION

The graduate questionnaire was a self-administered self-addressed stamped questionnaire conducted among accounting and business administration graduates of the School of Business and Industrial Studies (SBIS). The total population of graduates who obtained degrees over a period of 6 academic years since the inception of the Copperbelt University, from 1981 to 1986 inclusive was 501. All were sent questionnaires contrary to an original plan of obtaining a sample. This was decided upon after experiencing a very poor response rate of 11 out of 50 (22%) in the pilot study. The reasons for the low rate of return and the steps taken to rectify the problem are fully explained in the ensuing pages.

After taking remedial actions the total number of useful replies in the final questionnaire were 254 or 51%. The distribution of the response rates were: 30%, 15% and 6% of the total population for the first, second and overseas mailings respectively.

5.4.2. PREPARATION OF THE SAMPLING FRAME

The sampling frame used in the graduates' questionnaire comprised five lists of graduating students prepared after final examination results for the Campus Academic Board at the end of each of the academic years from 1981 to 1985. The sixth list for

1988 contained 4th year students, prepared at the time of registration by SBIS at the beginning of the academic year 1985/86. Technically, the students were not yet graduates at the beginning of this study although they had written examinations. As explained earlier, they were initially not supposed to be regarded as graduates. But pilot study results showed that if they were included among students, the final results would be biased since their population number of 88 was too large to be ignored. In addition it was feared that some of the questions would be meaningless or confusing. In fact by the time they responded to the final questionnaire, they had known whether or not they were graduates. Only a small number of 5 respondents, representing about 2% of the total graduates reported their plans of going back to the University to complete. But this was so small that inclusion of their responses in the graduates' questionnaire would not alter the main findings. In fact only three questions relating to whether they were working, their types of jobs and reasons why they were not working appeared to be irrelevant

5.4.3. ADMINISTRATION OF GRADUATES PILOT STUDY

A pilot study was conducted for the graduate questionnaire to samples of 10 from each of the five years from 1981 to 1985 for a total sample of 50 out of the graduands population of 413. This was deemed sufficient for some meaningful analysis to be done. The purposes of the pilot study were the same as those already outlined in the case of the undergraduate questionnaire.

5.4.3.1. Pilot Sample Size and Selection Procedure

The sample size used as explained above was 10 from each of the five years from a total graduates population of 413 (excluding 88 4th year 1988 students who had been piloted together with other students). The sampling interval was determined from the sampling fractions as:

Equation 5.1 Sampling Interval

Sampling fraction = f = n/N

Sampling interval = K = 1/f

Where: f = Sampling fraction i.e. the proportion of the population size to be interviewed.

n = Sample size determined to be interviewed.
N = Net total population size.

K = Sampling interval i.e. the Kth person to be selected for interview.

Taking the 1981 graduates totalling 79 as an example, the sampling interval was determined as follows:

Since n = 10 and N = 79
f = n/N = 10/79 = 1/8 i.e. a proportion of 13% of the 1981 graduates' population would be sampled.
K = 1/f = 1/n/N

$$= \frac{1 \times N}{n} = \frac{1 \times 79}{10} = 7.9 \sim 8$$

i.e. select every 8th person from the 1981 sampling list.

This procedure was repeated for the remaining years. The results are shown in Table 5.1. below.

Table 5.1 Pilot sample size

Year of Study	Population Size	Sample Size	Sampling Fraction	Sampling Interval
1981	79	10	10/79	8
1982	92	10	10/92	9
1983	94	10	10/94	9
1984	64	10	10/64	6
1985	84	10	10/84	8
Total	413	50		

A systematic sampling selection procedure of choosing every Kth person was used. In order to decide which respondent to begin the selection process with, numbers were written on pieces of paper and the random selection procedure described in the case of undergraduates questionnaire above was used for each of the year of study from 1981 to 1985. This was repeated for the set of 5 with a sample size of 10 until a total sample of 50 was selected.

A questionnaire with the researcher's introductory letter (See Exhibit 5A5.8), a Dean's letter and a self-addressed return stamped envelope were sent. The researcher's letter explained the purpose of the questionnaire and each of the sections. It also highlighted the importance of the information to be provided by them and how valuable their assistance was. They were asked to respond to the questionnaire within one week after receiving it. The Dean's letter solicited for their support explaining the importance of the possible results for the School and the country. It also stated that the project was endorsed by the school.

5.4.3.2. [redacted]

The response was very poor as only 11 out of 50 (or 22%) replied to the pilot study questionnaire. About 25 mailings were returned undelivered.

The major reason for the low response rate was lack of their reliable current postal addresses. As there was no other source of this information, the study initially relied on their personal

files in the Registrar's office of the University for sending the pilot questionnaires and the first mailing of the main questionnaire. It however transpired later that most of the addresses were too old as graduates were very mobile. Some of those addresses had been submitted when the students were first admitted to the University. Others related to those addresses given during holiday breaks. Only a few were available through their correspondence with the University after graduating.

Several minor problems resulted from lack of addresses. First, the usual postal delays were exacerbated as mails had to be redirected to addressee's known current address several times before it was finally received, as reported by some respondents to the second mailings. Second, graduates who were living in rural areas were severely affected by delays in postal services. Third, some claimed later when responding to reminders in the final questionnaire that they had received the questionnaires so late after the date line that they thought there was no need to reply. Fourth, other respondents had left for overseas.

The implications of the response rate were very serious. Some of these meant first, that if the same pattern prevailed in the final questionnaire the response rate would be very low. Second, this would in turn result in too few cases, rendering the use of statistical analytical techniques difficult. Third, even if the entire population of 413 were surveyed under typical conditions, this would result in 90 cases only. Yet there were many categories on some questions. Fourth, a response rate of 22% would not be representative of graduates. Fifth, it would be doubtful whether the readers would have any confidence in results from such a study which was based on 22% of the population.

5.4.4. FINAL GRADUATE QUESTIONNAIRE

5.4.4.1. Administration of the Graduate Questionnaire

After the questionnaire instrument was revised, it was therefore decided to take several drastic measures in order to rectify the likely anomaly and thereby increase the response rate in the final questionnaire. The ultimate objective was to increase the precision of estimators.

First, instead of taking a sample as had been originally planned, it was found necessary to cover the whole population and send the questionnaires to all graduates of SBIS since the inception of the University covering a period of six years. This included the 1988 graduates who numbered 88. The total population therefore increased from 413 to 501.

Second, other measures were taken to reduce the number of undelivered mail and increase the responses:

1) Three addresses were taken from their files:
   a) permanent home addresses;
   b) any one or two addresses used during any holiday while at the University;
   c) addresses left with the Registrar's department at the University at the time of graduation or any available correspondence address with the Registrar's department;

2) Lecturers and any members of the University who knew the whereabouts of SBIS graduates were asked for their current addresses;

3) SBIS graduates were personally asked for their contact addresses and those of their colleagues when met by chance by the researcher when conducting businessmen questionnaire interviews in the major towns;

4) an appeal letter from the researcher explaining the importance of the project were enclosed (Exhibit 5A5.10);

5) an appeal letter requesting for current addresses of any SBIS graduates was enclosed in each mailing (Exhibit 5A5.11);

6) an appeal letter from the Dean of the School to the respondents was enclosed (Exhibit 5A5.12);

7) undelivered mail were forwarded to the next current of the three addresses on the mailing list, or to local or overseas addresses received through the appeals.

8) in the second mailing, a reminder letter (Exhibit 5A5.13) was sent to graduates, with the enclosures indicated above appealing for their assistance. The actual second mailings in Zambia were 338 letters or 68% of the total graduates' population.

9) for the second mailing, in addition to the actions taken in the first mailing, letters were sent to companies known or reported by other respondents to have employed graduates. They were requested for their assistance in providing names of any SBIS graduates employed by them and their addresses

if they were abroad. The Dean's letter of support for the project was enclosed. This was done in realisation that the response rate to the first mailing was 30% only. Most of the addresses received for overseas respondents while in Zambia came from this source.

10) it was decided to forward mails to respondents who were abroad, from Zambia. The procedure in (5) above of getting current addresses from other students was repeated when sending mails to overseas respondents when their addresses were later received from other respondents (Exhibit 5A5.14).

11) When the researcher returned to the U.K., a third reminder (or first while in the U.K.) was sent to graduates who had been overseas while the researcher was in Zambia. When sending the fourth reminder, the method of obtaining current addresses from other students was again varied. The difference was that this time personalised appeal letters were written (see Exhibit 5A5.15). In addition, specific names of graduates who were known to be abroad, but whose addresses were not known, were included on the list soliciting for their current addresses (Exhibit 5A5.16).

5.4.4.3. Overseas Third and Fourth Mailings

After the first mailing it was discovered through returned mail, relatives or employers that a good number of graduates totalling about 34 were studying abroad. As it was feared that their exclusion might bias the results, more action was taken.

First, a total of 34 graduates whose addresses were known were sent questionnaires containing all the enclosures outlined above (Exhibit 5A5.14). There was a minor variation in the researcher's appeal letter sent to overseas graduates. They were asked to forward their responses to the researcher's address at the University of Stirling. A longer period of one Month was also allowed to account for about two weeks it takes for Zambian mail to reach overseas destinations. In several cases these mailings were third reminders, although some might have received it as the first mailing.

Upon the researcher's arrival at Stirling on 19th January, 1987, only 7 mails had been delivered. But since more addresses of graduates mainly those living in the U.K. had been provided, a third mailing (or first while in the U.K.) was sent at the end of February, giving a dead line of 31st March, 1987. The fourth mailing (or second while in the U.K.) was carried out with a final dead line of 15th April, 1987. In this last one, personalised appeal letters were sent to them (see Exhibit 5A5.16, referred to above). Thus a total of 52 overseas graduates were found (see sample reply in exhibit 5A5.17). But only 43 had addresses. An attempt had been made to get addresses for 7 of the remaining ones. One was in New York, but his address was unknown. Another had returned to Zambia and it was found pointless to attempt to trace him.

5.4.4.4. Graduates' Questionnaire Response Rates

The final results were that despite having taken all the necessary actions, a total of 87 mails were eventually returned undelivered, while in Zambia. Of these, 37 were local while 30 graduates were abroad and could not be traced. However, 258 out of the total of 501 or 51% responded. But 2 of these were discarded because although the respondents were on the sampling frames of graduates, they had not actually graduated. They had been excluded from studies long before this research had began. Thus a total of 254 out of 501 or a response rate of 51% was achieved. This was distributed as follows: First mail response (30%), second mail response (15%), third and fourth overseas's mail response (6%). The overseas response represented 54% of all graduates who were known to have been abroad. The overall response rate was therefore considered to be a success considering the difficulties enumerated above. The sample was also deemed to be representative of all graduates across all the years and the two disciplines, business and accountancy and of those who were abroad

5.5. BUSINESSMEN QUESTIONNAIRE

5.5.1. INTRODUCTION

The businessmen questionnaire was administered to a total net sample of 398 businessmen in three largest towns in the localised urban areas of Lusaka (the Capital City), Ndola and Kitwe. A proportional systematic sampling procedure was used. A sampling frame was prepared from companies' files in the Department of Trade and the Registrar of Companies in the Ministry of Commerce and Industry. The preparation of the sampling frame was very demanding, taking about two Months. This was basically because the filing systems were very disorganised in the Department of Trade and the Registrar of Companies. The number of businessmen actually interviewed, with the help of research assistants, over a period of three Months of actual interviewing were 218 representing 55% of the total net sample of businessmen. The selection of research assistants, preparation of the sampling frame, determination of sample size, sample selection and the interviewing process will be discussed in the ensuing sections.

5.5.2. RESEARCH ASSISTANTS

A total of 8 research assistants helped in interviewing businessmen. Four of these were based in Lusaka, two in Ndola and two in Kitwe. After being selected, they were given orientation and guidelines for conducting interviews and were supervised by the researcher. Those who were based in Ndola and Kitwe also

assisted in the preparation of addresses for the graduate questionnaire and in dispatching them. Selection and orientation of research assistants is next taken up for discussion.

5.5.2.1. SELECTION OF RESEARCH ASSISTANTS

Originally, it was intended to seek the assistance of third year SBIS students. However, since most of them were engaged in their course projects and others had already started working by the time the selection was done, only two third year students were found suitable. The remaining six were second year students. The following selection criterion were used:

a) Academic

i) preference was to be given to 3rd year students majoring in B.A. degree;

ii) previous experience in own project or acting as research assistant, was considered an advantage.

b) Personality

i) responsible, hard working and interested in the project;

ii) honest (important since students had to work on their own most of the time);

iii) prepared to walk long distances on foot in contacting businessmen after they had been dropped in a central place or from main bus stops;

iv) polite, understanding and tolerant.

c) Communication

A bi-lingual fluent person in two Zambian languages in addition to English. One of the two local languages was to be Bemba for the Copperbelt province interviewers and Nyanja for Lusaka Province. This was essential since he was expected to communicate to respondents, who could not fluently speak English, in the main language spoken in either of the provinces.

d) Accommodation

The person was expected to be residing in either Lusaka, Ndola or Kitwe or be able to find his own accommodation in these areas as funds were scarce.

e) Payment

Prepared to accept the University standard rate payment of K10 per day which was ruling at that time.

Interviews were held and selection made in August, 1988.

5.5.2.2. Orientation of Research Assistants

The four research assistants on the Copperbelt were met in two groups of 2 persons in Kitwe. The other four in Lusaka were also met separately in groups of 2. The dividing of assistants in groups of two persons though happened by chance according to when they were taken on, turned out to be beneficial when they were taken into the field to have first experience on observing how to conduct interviews or getting first hand on carrying out the interviews themselves. A manager would feel more comfortable to

be approached for an interview by a group of three persons and would be more free to respond than by a group of say five.

The first day was spent on introducing ourselves to one another, explaining the purpose of the research project and the expected roles of each one of us. They were also asked to read through the questionnaire, understand it, raise questions, discuss them between themselves and then share their views together. As a result, some questions which could be misunderstood were changed.

The Second day was spent on role playing. Each research assistant acted both roles of interviewer and interviewee several times. Guidelines on how to conduct interviews in the field were formally distributed (see chapter 5 Appendix - Exhibit 5A5.1 & Exhibit 5A5.2 for authorisation letter for them to help the researcher). The third day was spent in the field showing them how to locate businesses, gaining access to the interviewee and interviewing him. The researcher played the active part of interviewing while the two research assistants learned. They were however asked to record every response to the questionnaire. Between interviews, sometime was spent going through the responses each of us had recorded. Questions were posed by the researcher or raised by the assistants and discrepancies were ironed out.

The fourth day was again spent in the field. But this time, each of the assistants took turns, playing the active part of conducting the full interview while the researcher observed. All of us were recording. Later each interview was evaluated and the

responses were discussed on how best the interviews could have been done and the responses could have been recorded. The remaining two days were spent in the field, helping the assistants get used to locating businesses, gaining access to the interviewee and conducting interviews by themselves. The researcher merely followed them and observed how they were handling the interviews, rendering assistance when needed. At times, one assistant would be left alone interviewing while the researcher helped the other assistant locate and interview the next firm.

By the second week, assistants in Kitwe were merely dropped at their respective places and they carried out full interviews. Those in Ndola and Kitwe quickly proved to be very knowledgeable and responsible. They were then left on their own after the second week since the researcher had to return to Lusaka to meet the other assistants.

In Lusaka, the same process, as explained above was repeated. In addition, Lusaka assistants helped in dispatching introductory letters to businessmen. These letters were found later to be very essential in helping gaining access to businessmen. As the area to be covered in Lusaka was vast (see at the end of this section), the researcher worked very closely with the research assistants on a daily basis. There was need to transport them from one place to another as firms were not close together as is fully explained in section 5.5.5.5. They were however, left on their own for several days when the researcher had to go to the Copperbelt to review the progress of the field work and carry out some checks on whether interviews had been conducted properly.

5.5.3 PREPARATION OF THE SAMPLING FRAME

5.5.3.1. REQUIRED INFORMATION FOR A SAMPLING FRAME

In preparing a sampling frame, several basic pieces of "information" were needed in order to be able to locate a firm and interview a particular person - the owner or the managing director (M.D) (if the firm was employee managed). The information needed in order of importance was therefore:

1) whether a firm had been struck off the register;

2) date of incorporation of a company or date of registration for a business name in the case of unlimited organisations. This information was essential in order to draw a sample of firms that were formed in the years of interest of the project. These years were 1965, 1970, 1975, 1980 then from 1981 to 1985;

3) registered place of business. This was necessary in order to be able to locate a firm and the owner or M.D.;

4) residential place of owner or directors. It was anticipated that some businesses' premises would not be easily found, particularly for organisations registered under the business names. Even where these were found, some would be lawyers' addresses. Hence in those situations, it might become necessary to contact the owners or directors at their residential homes;

5) telephone numbers for the registered place of business or residential place of owners or directors, for contacting them if all other efforts proved difficult;

6) postal addresses for posting introductory letters and request for an appointment time;

7) names of owners or directors. These were thought to be useful in addressing letters to them, searching for their companies or talking to them in their personal capacity. This proved very useful in the field when searching for firms or gaining access to the premises. If a business name was not known when asking for directions, the guides asked for the name of the owner of the business (see section 5.5.5.4.3.2);

8) nationality of the owner or directors. This was needed for determining the number of businesses owned by Zambians. This also proved useful when seeking the owner as it was often asked what the nationality of the person who owned the firm being looked for was;

9) product(s) of the firm. This information was useful to the researcher and the assistants in knowing something about a company to be interviewed. Again when making enquiries, the type of product(s) made by the firm being sought for was often asked;

10) capital investment when the firm was formed. This information was wanted for determining the average amount of capital that was needed for starting up businesses between small and large firms;

11) type of ownership, in order - to know the ownership structure of the manufacturing sector.

It should be noted that when preparing the sampling frame, the most critical pieces of information needed were 6, i.e. up to postal addresses.

5.5.3.2. DRAWING UP THE SAMPLING FRAME

As no published manufacturing directory was available for a sampling frame, two sources of lists of manufacturing firms from the Department of Trade in the Ministry of Commerce and Industry were used. These were supplemented with information from company or business name files in the Registrar of Companies.

The first list of firms was a typed Locational Directory of Manufacturing firms according to towns with postal addresses only for firms which had obtained manufacturing licences from 1978 to August 1982. The second list of firms was a hand written list of firms which had applied for and received manufacturing licences from all over the country from September 1982 to 1986. These were processed and written at random according to the date when a manufacturing licence was granted on a daily basis. Thus it was not in any order apart from the chronological date.

The law requiring manufacturing businesses to obtain a manufacturing licence was enacted in 1978. Thus all firms which had been incorporated before this dated were supposed to obtain a manufacturing licence. Those formed after this date were required to obtain it immediately after incorporation or registration under the Business Names Act. It was illegal to operate without a manufacturing licence. It may be argued that the list may not have been inclusive as some firms may not have registered particularly those that had been operating before the enactment or for very small firms even though it is legally required. While this can not be ruled out, the list was representative

enough as even very small firms, such as a one person tailoring business operated from residential homes and bakeries, were registered, as will be shown in the analysis. These small businesses as it will be noted later were many. This situation may have been greatly influenced by the requirement for a manufacturing licence by local authorities before trading licences could be issued.

None of the two lists of firms had all the critical information needed to prepare the sampling frame for selecting firms for interviewing. The information contained on the first list with firms which obtained manufacturing licences by August 1982, were the name of the business, the postal address and locational town only. The major obstacles were therefore lack of information on:

a) whether the firm had ceased operating;
b) date of incorporation;
c) principal registered place of business and;
d) residential place of owner or director.

It was therefore not possible to use this list in drawing up a sample without seeking these pertinent pieces of information.

The second list for firms which obtained manufacturing licences from September, 1982 to 1985 was more inclusive. This list was of great use. It contained information on the date of incorporation or registration for a business name, date when manufacturing licence was given, business or home telephone number where available, postal addresses, product(s) of the firm and capital investment. Albeit its advantages, three pieces out

of the six pieces of critical information were missing. Those missing as it will be recalled were:

a) whether the firm had been struck off the register;
b) registered principal place of business and
c) residential place of owner or directors.

In addition, this list was arranged according to the date of issuing the manufacturing licence regardless of the location of the firm. This list could therefore not be used without modifying it or seeking for the missing important information before drawing up a sample.

It was therefore decided to combine the two lists and seek the missing information from files in the Department of Trade (manufacturing licence section) and the Registrar of Companies to complement each other. In order to draw the sampling frame the theoretically ideal procedure would have been first, the transcription and listing of all the firms with complete relevant information for the first typed list (with firms which got the manufacturing licences up to August 1982). Second, copying firms, falling in the locations covered by the study (Lusaka, Ndola and Kitwe) from the second list (with firms that were issued with manufacturing licences since September, 1982). Then completing them with required information. Third, combining the two lists for a sampling frame and drawing up a sample. The first two steps were attempted for several pages of lists. The process was however abandoned as it was found impractical. It would have been too costly and time consuming since it would have meant digging out all the files of those companies from both the Department of

Trade and the Registrar of Companies and copying the required information before selecting the sample.

It was therefore decided to adopt a five step procedure in preparing the sampling frame and selecting a sample as:

1) transcribe the second list (with firms from 1982 to 1986) by identifying firms falling in the years of interest and any one of the three towns of interest;

2) combine the two lists and find the total number of firms on the two lists in the whole country and in the towns of interest;

3) determine the sample size;

4) using a random proportional stratified systematic sampling procedure, select every nth firm if it was formed in any year of interest or else drop it and replace it with the next firm;

5) after selecting a sample, seek other pertinent information from both the Department of Trade and the Registrar of Companies.

But even this exercise was very demanding and problematic as the whole process took about two Months to compile the businesses and select a gross sample. Some firms were dropped at a later stage, leaving a net sample, before embarking on the interviewing process in the field.

5.5.4. FINAL BUSINESSMEN QUESTIONNAIRE

5.5.4.1. POPULATION SIZE, SAMPLE SIZE DETERMINATION AND SELECTION

5.5.4.1.1 Manufacturing Firms Population

Coming back to the implementation of the first two of the five steps referred to in the previous paragraph, when the second list of firms was transcribed according to location and the two lists were combined, the total number of firms from the two lists from the entire country were 3418. Stratification of firms according to towns showed that the total number of firms falling into the three towns of interest were 2150 (table 5.2). This represented 63% (2150 out of 3418) of the total manufacturing firms in Zambia. The proportional distribution of the 2150 firms in each of the three towns was: Lusaka (57%), Ndola (25%) and Kitwe (18%) (see Table 5.3).

Thus to maintain the same urban and country wide distribution of firms in the three towns, the proportions to be sampled were to be: Lusaka 57%, Ndola 25% and Kitwe 18% out of the total selected sample from the three areas (table 5.3).

5.5.4.1.2 Manufacturing Firms Sample Size Determination

Step 3 above required determining the sample size. How big a sample should be is an intricate problem that faces most researchers particularly those of the social sciences and especially the novice.

More generally it depends on what one is looking for and more specially on the type of statistical test to be applied to the data. In this study five factors were initially considered in attempting to arrive at the number of businessmen to administer the questionnaire to. These were:

a) patterns expected from research results;
b) kinds of data patterns and statistics needed;
c) number of variables to be analysed for possible relationships together at once;
d) effects of standard error;
e) pilot response rate.

First, if the patterns expected from research results are "very strong (like big differences between batch means), then a relatively small sample may do" (Erickson, 1979: 139). But if one is looking for "a subtle effect, a larger N will be needed". Since the data was basically categorical, proportional differences could not easily be detected unless a large sample was chosen.

Second, the kinds of data patterns (categorical and quantity) and the kinds of statistics to be deployed were considered in trying to determine the sample size.

Third, since the data involved examining relationships in many variables at once, then more cases were needed to have sufficient cell entries (minimum of 5 cases for cross tabulations) than if one was looking at just a few variables.

Fourth, the effects of the standard error on the confidence interval determination which is "very wide with a proportion" (Rowntree, 1981: 100) was regarded to be influential in the choice of the sample. The more precision required, the smaller had to be the sampling error of the proportion within which the true proportion was included (recall from appendix 5A2 that a high confidence of at least 95%, preferably 99%, was required). The negative result of high confidence was widening the allowable possible sample error for the percentage (or proportion) range within which the true proportion would probably lie. Therefore in order to achieve a more precise estimate, this called for a large sample. There was however a limit as diminishing returns set in. That is, to "halve the allowance for error it would be necessary to multiply the sample size by four" (Crisp, 1981: 50) since the standard error is calculated from the square root of the sample.

In order to estimate a minimum sample size for the Z-test problem (i.e. creation of employment), there were three basic requirements (Erickson & Nosanchuk, 1979: 155):

1) the standard deviation of the universe had to be known;
2) the researcher had to decide on the smallest difference of interest in the variable between the population mean and the sample mean i.e. $(\bar{x} - \mu)$;
3) The researcher had to decide the significance level at which he wanted to detect this difference;

A note on the standard deviation is required before giving the formula. Since in the real world, it is in most cases impossible to know the population standard deviation (S), in

practice, substitution with the sampling standard error of the mean is statistically acceptable. The only snag is that in practice most social investigations are done once only. Therefore the pilot study standard deviation was deemed to be sufficient to determine the standard error which in turn estimated the population standard deviation. The standard error of the mean depended on three factors:

a) the standard deviation within the sample. The larger the variability, the more likely that the means of such samples would vary and consequently the true population.

b) the sample size. The larger the pilot study sample, the closer (on average) would the means of such samples be to the population mean.

c) the proportion covered in the pilot study of the true universe.

In this study, a pilot study of 20 small businessmen was carried out. But 5 cases i.e. one firm out of four was located. The three pieces of information required were:

S : the population standard deviation, using its sample estimate, s;

Z : the number of standard errors required by the confidence level(95% i.e. significance level of 1.96);

E or $(\bar{x} - \mu)$: the range of error around the sample estimate acceptable to the researcher.

The general formula used for quantity variables using the standard error of the mean and Z-score:

Equation 5.2 calculation of Z-score

$$Z = \frac{E}{s / \sqrt{n}}$$

Applying Erickson and Nosanchuk (1979:55) modified formula gives equation 5A2.2 seen in appendix 5A2 for calculation of Z-score :

$$Z = \frac{\bar{x} - \mu.}{s / \sqrt{n}}$$

where:

Z = standard scores
$\bar{x}$ = the sample mean
μ = the population mean
S = standard deviation
n = the sample size (to be determined).

Then solving equation 5.2 (or 5A2.2) gives:

$$Z^2 = \frac{E^2}{s^2/n} \qquad \text{where } E = \bar{x} - \mu.$$

$$\frac{s^2}{n} = \frac{E^2}{Z^2}; \qquad s^2 = n\,\frac{(E^2)}{(Z^2)}$$

$$n = \frac{s^2 Z^2}{E^2} = \sqrt{\frac{Zs}{E}}$$

$$= \sqrt{\frac{Z\,S}{\bar{x} - \mu.}} \qquad \text{substituting } \bar{x} - \mu \text{ for } E$$

After deriving the formula, n could be determined at this stage since the following variables were then known or could be estimated:

S = population standard deviation estimated from s, pilot study sample standard deviation.

E or $\bar{x} - \mu$ = smallest difference acceptable estimated from population mean

Z standard score determined from Z-score statistical tables at 95% confidence interval or critical value = α = 0.05 i.e. +/- 1.96 for two tailed

The complication in determining the sample size was that most of the questions were categorical requiring a different formula based on the binomial distribution (see section 5A2.5). It involves "attributes rather than variables" which are either present or absent (Crimp, 1981: 50). The population and its members are described as:

P = members who have an attribute under study
Q = members who do not have the attribute
N = P + Q = the population.

As in the case of the quantity variable, p, the sampling proportion with an attribute is used as an estimator of the true population proportion. Calculating the sample size, n, needed the following:

Sp = the standard error of a proportion which takes into account:
p = the proportion with the attribute
Z = standardized scores

Therefore:

$$Z = \frac{E}{\sqrt{pq/n}} \quad \text{and solving for } n \text{ gives:}$$

$$\sqrt{pq/n} = \frac{E}{Z} \; ; \qquad pq = \frac{E^2}{Z^2} \qquad \text{and}$$

$$n = \frac{Z^2\, pq}{E^2} = \frac{pq \times Z^2}{Z^2}$$

where as per equation 5A2.18:

$$E = Sp = \sqrt{\frac{pq}{n}} = \sqrt{\frac{p(1-p)}{n}} \quad \text{or} \quad \sqrt{\frac{p(100-p)}{n}}$$

= standard error of the proportionate.

In spite of these three pieces of information, determining the sample size was not as easy as portrayed above since other factors had to be taken into account other than the standard deviation, the error tolerance level and the confidence level at which the difference was acceptable. Crimp (1981: 52) observed:

> since surveys cover a variety of characteristics and were / are likely to want to consider these for a number of sub-groups, within the total sample, the full statistical procedure is unduly laborious.... In determining sample size it is common practice to ensure that there are at least 50, and preferably 100, individuals in the smallest sub-group likely to be considered in isolation...sample size is of course, often constrained by cost. We start with a budgetary allowance sufficient to buy a certain number of interviews.

Moser and Kalton (1981: 148) also stated:

> These simple formulae...merely illustrate the principle involved; in practice, the task of deciding on the sample size is more complicated than they would suggest.

Since, first major issues covered both quantity and categorical data, second there were over 150 variables of interest, making it difficult to decide which of them to base the calculations on, and third the pilot sample of 5 was too small it was decided not to use the formulae above. Instead ensuring large sample size and cost became paramount. It was reasoned out that if at least 100 replies were to be achieved, which were necessary since there were several subgroups within the study (small and large, owner managed and employee managed firms etc.) and many variables within these subgroups for investigation, a large sample was required. At the rate of 5 successful interviews out of 20 firms, or 1 out of 4, a sample size of at least 400 firms was deemed necessary. Since N, the total number of firms in the three towns was known, the sample size was determined as:

$$1/f/N = 1/4 \times 2150 = 537.5 \text{ or approximately } 540.$$

Where: N = Population elements in the three towns.
1/f = response rate from the pilot study

5.5.4.1.3 Sample Selection: Gross Sample

Step 4 above called for using a random proportional stratified systematic sampling procedure of selecting every nth firm. However, the actual method used may be referred to as a quasi-random proportional stratified systematic sampling procedure, as is explained below.

The method was called 'quasi-random' (near simple random method) because the list of firms from which the systematic sample was selected as explained in section 5.5.5.3.2. above, was "arranged more or less at random" as businesses were being registered in the case of firms on the hand written list and only according to locational town on the typed list. In addition, the feature by which the list was arranged was "not related to the subject of the survey" (Moser and Kalton, 1971: 83). Thus this resembled a simple random sample. It was regarded as a random sample because determining the beginning point was done by chance, by writing all the numbers representing the sampling interval on pieces of paper and then choosing one of them. Further, it was random because once the starting point had been determined by chance, the particular units to be sampled were determined again by chance and not by any influence of the researcher.

It was also referred to as '[illegible] stratified'. It was proportionate because the sampling fraction, n/N, was the same, within each stratum or town and for all the towns, according to the share of the population in each of the towns. Crimp (1981:41) refers to this as "dividing the population into

groups (or strata) whose relative weight is known". In this case, the weight is equivalent to n/N or the sampling proportion. In simple terms, proportional sampling means selecting a sample according to the size of the subpopulation or uniform weight in relation to the total population being investigated. This means that the sample size that was chosen was in proportion to the number of firms in the subpupulation size of each town. In other words, the total sample size was distributed between the strata (towns) according to the size of (proportionate to) each of the three towns. Thus, Lusaka, the Capital city with more firms got the highest allocation of percentage number of firms to be sampled, followed by the City of Ndola and least by the City of Kitwe, according to the relative weight of the subpopulation existing in each of the three cities.

Furthermore, the method was called 'stratified' because, in a lay man's language, the total population of the firms was divided into two categories (or strata). These were first, according to the year of formation, which was of primary interest to the study (i.e. 1965, 1970, 1975, 1980, and 1981 to 1985). Second, according to location or town of interest. These were determined by the researcher, influenced by the nature of the study.

Last the method was called systematic because, in non-statistical terms, the sample was selected using some order based upon an interval. The sample was selected according to a plan and not completely by chance, but partially, because the method relied on a sampling interval, K, which was predetermined by the researcher. Thus the process of selecting an

interval *'a priori'* meant that all samples of size n from the population of N were not given an equal chance of being included in the sample. This was so because once the sampling fraction n/N was decided upon then the random selection of the firm to begin the selection process with, determined the whole sample. As a result all the other firms between the starting point and the next firm to be selected were virtually ignored.

The quasi-random proportional stratified systematic sampling procedure used may therefore be defined as a selection process whereby the total population is sub-divided into sub-populations according to factors of interest before drawing a total sample from the entire population in relation to the weight of each of the sub-populations in a uniform order.

The proportionate stratified sample was preferred for two reasons. First, stratified was preferable in order to increase the precision of estimators in the sample (which was also accomplished by increasing the sample size). This was so because that ensured that the three major towns in the country were correctly represented in the sample. Findings from such a study would relate to the whole country and would be believed more easily than would results from one City, for example Lusaka. In the later situation, relating the results to the country as a whole would be left to the influence of chance.

The second reason for preferring a stratified proportionate sample was that correctly representing the firms according to the size of the population in each of the three cities would provide unbiased estimates of measurable precision of the different

variables of the study. These variables would for example include employment creation of small versus large firms, firm formation rates, access to financial resources, types of manufacturing firms and requirements of entrepreneurship in the capital City of Lusaka, the commercial City of Ndola and the basically mining City of Kitwe. More confidence would be put on results from such a sample. The ultimate benefit of correct representation is that results are more precise since the total variation within a population (composed of between and within data) is reduced to one possible source of error i.e. within data variation of the standard error instead of leaving both of them to chance. It is however worth mentioning that due to the nature of the study, with so many variables being investigated, it is not easy to relate all of them to differences in town location. Some would not be affected by this factor at all. This is so because the relative weight of influence by (or importance of) the locational factor of a firm would not be known. In short, even though the sampling proportions were known, not every variable would depend on the locational factor.

The theoretical sampling proportions or weights to be placed on each of the Cities, namely Lusaka, Ndola and Kitwe were supposed to be 57%, 25% and 18% of the sample n = 540 from the population of 2150 (table 5.3). Hence since n, N and f (the sampling fraction were known), the sampling interval, K, was calculated as:

Sampling fraction = $f = n/N$

Sampling interval = $K = 1/f = \frac{1 \times N}{n}$

Where: n = Sample size determined to be interviewed.

N = Net total population size.

f = Sampling fraction i.e. the proportion of the population size to be interviewed.

K = Sampling interval i.e. the Kth person to be selected for interview.

Therefore since n = 540 and N = 2150

$$f = n/N = 540/2150 \sim 1/4$$

i.e. sample a 1/4 of the population

and $K = 1/f = 1/n/N$

$$= \frac{1 \times N}{n} = \frac{1 \times 2150}{540} = 4$$

i.e. select every 4th firm from the population of 2150

Thus every fourth firm in the three towns (Lusaka, Ndola and Kitwe) that was formed in the years covered by the study was to be picked or else the next case was selected. However, the actual gross sample differed from the theoretical sample because many selected firms, from the typed list, whose year of formation was not known when they were first picked, were droped after realising that they did not fall in the years of study. These were: 1965, 1970, 1975, 1980 up to 1985.

Thus fewer firms were finally selected than was anticipated because there were not enough firms from the list that satisfied the requirements. Thus instead of obtaining the theoretical sample of 540 firms only 449 gross sample was achieved.

5.5.4.1.4. Sample Selection: Net Sample

The figure of 449 firms obtained above was referred to as gross sample because a further total of 53 firms had to be excluded, before commencing the interviews. They were left out because they failed to fulfil the basic requirements of step 5. This called for completing the needed information for all selected firms before going into the field to interview the owners or directors. The most critical information it will be recalled were:

a) whether the firm had been struck off the register;
b) whether the date of incorporation or registration for a business name fell under the period of study;
c) availability of registered principal place of business or;
d) availability of residential place of owner or directors.

Thus a net sample of 398 firms which satisfied the basic requirements was finally selected for interviews (see table 5.4). A sample of 398 was by many standards sufficient for statistical purposes. A minimum of 30 cases is for example required for a normal distribution when using ANOVA (Levin, 1987: 342). Dr Buchanan of the Department of Business studies at the University of Glasgow had told the researcher that it would take him (Buchanan) 100 days to interview 100 business executives. This therefore meant that survey alone would need at least 12 months. Evidence elsewhere showed that the minimum required statistical sample was 50 cases (Curran, 1978; Swan, 1971: 34). Curran used 233 while Swan's sample was 50. The reasons why the remaining 53 firms did not meet the basic requirements were due to the problems encountered in the process of extracting missing information from the firms' files in the Department of Trade and

the Registrar of Companies. These reasons and problems are now picked up for discussion in the next three sections.

5.5.4.1.4.1. Problems of Extracting Information for Selected Sample: Reasons for Exclusion

There were six reasons why the 53 firms were excluded. Four of these reasons centred on the poor organisation of the filing systems in the Department of Trade and the Registrar of Companies. The other two related to distant location of the firms. These reasons and the corresponding number of firms falling under each of them were:

a) firms had been struck off the register, but such information was only known from the companies files in the Registrar of Companies, after a firm had been already selected. It was decided to leave them out because it was anticipated that locating them would be an insurmountable task (The number of firms excluded were: Lusaka 5, Ndola 10, Kitwe 1);

b) missing index numbers from filling cabinet, or illegible index numbers where the card index was mutilated through usage. The numbers were essential in order to locate the file from where to copy essential information. (The number of firms were: Lusaka 2, Kitwe 1);

c) missing files from the Registrar of companies or the Department of Trade for copying required information such as current firm's location, current names of directors or their residential addresses. Even the later were essential in locating them for interviews if their business addresses proved unsuccessful (Lusaka 8, Ndola 1, Kitwe 4).

d) files with incomplete information such as that mentioned in (c) above. In addition, some of addresses were not specific, the area referred to was too wide. Further in other situations only the box number was given (Lusaka 2, Ndola 1, Kitwe 2).

e) distant firm's location in Lusaka, some of them were as far away as 80 Kilometres. A couple of firms were for example located at Jam Chibuluma Village in Chief Siakumbila in Mumbwa. A few others were found to be in Chief Mungule's area, or Karubwe area in Lusaka Rural. This fact was not known when selecting the firm. The benefits of following such firms were overshadowed by cost and time constraints. Details will be explained in Methodology (The number of firms in this category were: Lusaka 10).

f) firm currently located in a distant town or province from the one initially obtained. Some firms had moved to places such as Livingstone, Kasama or Kawambwa, which were hundreds of Kilometres away. Some firms which had relocated from one town to another within the three towns covered by the study were followed up and some were actually interviewed. More details are discussed in section 5.5.5.5., under field work experiences of this chapter.

Thus getting all the required information for the gross sample proved very difficult. The basic reason for the state of affairs centred on the poor and inefficient organisation of files systems adopted in both the Department of Trade and the Registrar of Companies. In collecting information, the study made use of both departments. This was so because there was no consistency in

the information kept in one department. It was therefore mandatory to search for and countercheck for the same information in both departments. The organisational problems related to the file systems used in each department will now be highlighted in the next two subsections.

5.5.4.1.4.1.1. Problems of Extracting Information for Selected Sample: Organisations of the Filing system in the Department of Trade

There was no filing card index based upon the firm's name or International Standard Industrial Classification (ISIC) in the Department of trade. What was available was product index for locating ISIC numbers and names of firms. It was therefore necessary to know the product of a firm before looking for its name. The product category was then reclassified according to the relevant ISIC group. All firms belonging to each ISIC classification were then listed in ascending order. This was based upon a specific file number allocated to each firm, with the first four digits being the ISIC product classification then followed by the file number. It was after obtaining the file number that the firm's manufacturing licence file was then searched for from cabinets.

Thus before looking for the manufacturing licence file, one had to know the file number or the basic product. In the case of the later, the second step was then to search through the basic product for the product sub-classification. The third step was to search through all the companies producing the same or similar products until the firm's name and the relevant file number were located.

This was a cumbersome, inefficient and time consuming exercise. This was particularly so for firms on the second list where only the name of the firm and its location, it will be recalled, was available. This was also true for firms on the first list that were issued with manufacturing licences before the ISIC file numbering system was introduced, when an old filing system using MC was applied.

This therefore meant that using the name of the firm, one had to guess from the name, the type of product(s) the firm was most likely making. Then after guessing the product (or if it was available where listed on the second list), one had to make several attempts in searching for the correct product classification (for example bakery, chemicals or engineering) and go through all the firms in that class. If it happened to be a wrong one, one had to go to the next likely category and so on until the firm's name and file number were found.

This process was manageable for firms' names which reflected their trade or sector such as "Jacks Joinery Ltd", or "Chota Clothing Manufacturers". In these two cases, one would look at wood and cloth product categories respectively. In many cases it was virtually impossible to guess the product category by merely knowing the name of a firm such as "Mundea Enterprises" or "Lupande Ltd". A lot of useful time was therefore lost in finding such firms. Even experienced workers within the department who were used to the system had great problems in locating firms' file numbers when asked for assistance. They kept on turning pages of the booklet forwards and backwards in order to locate the firms. Their only advantage was that they were familiar with

the names of firms and their products. A new employee would have great difficulties in learning the system. In a few cases, those who were assisting the researcher had also to refer some firms to other departments to find out their products. This was indeed unnecessary.

These problems could not be attributed to lack of time by being too busy to rectify the anomalies. In this particular department, most employees had more time than they could usefully utilise. It was merely sheer irresponsibility and laziness. One lady used to spend about half of her time knitting in the office. Another gentleman effectively worked for a maximum of four hours out of the official eight hour working day. He used to arrive in the office about 9:00 hours instead of the official 8:00 hours. He would then spend the next two hours reading newspapers. After working for about one hour, he would go to town centre for his personal errands and return about 15:00 hours with purchased products for reselling at home.

Once the firm's manufacturing licence file had been located, information relating to the following were copied:

1) date of incorporation or business name registration;
2) registered place of business;
3) residential place of owner or directors;
4) telephone numbers;
5) postal addresses (if more current than the one already available);
6) names of owners and their nationalities if available;
7) product category;
8) capital investment.

It was however not possible to find all the information required in the Department of Trade. Information on whether a firm had been struck off the register, most recent changes in particulars relating to the registered principal place of business or residential address of owners or directors were missing.

The problem was that where a firm had been issued with a manufacturing licence a long time back for example in 1978, many changes in the information required had taken place making it obsolete. In spite of this such information was sometimes the best available particularly for unincorporated firms. These were not legally required to submit changes to the Registrar of Companies. Hence if they were registered with the Registrar of Companies prior to 1978 when they were legally required to obtain a manufacturing licence by the Department of Trade, the information in the Department of Trade though too old was the best that could be obtained.

In addition, for firms which had registered with the Registrar of Companies recently, the Department of Trade had the most recent information in some cases since firm registration normally took place earlier than licence registration. Still in other cases, existing registered businesses applied for manufacturing licences for different new product categories even though the firms themselves had been existing for a long time. In such cases, the correspondence addresses were the most recent addresses than that available at the time of registration of the business or of obtaining the first manufacturing licence. It

therefore became necessary to read through some correspondence to establish whether or not a firm had changed premises. There was also a need to compare the information from the Department of Trade to that obtained later from the Registrar of Companies.

In order to get the most recent information it was therefore decided that since the date of issuing a licence was more current than the date of registering a business, the following assumptions would be made:

a) that the postal and principal place of business compiled by the Department of Trade was the most current available information for firms registered under BUSINESS NAMES, unless evidence of most current correspondence showed otherwise;

b) that the reported changes to the Registrar of Companies (as required by law) was the most recent for the principal place of business and names of directors for LIMITED COMPANIES, unless other evidence showed otherwise such as new manufacturing licence date or no changes had been submitted.

Sometimes it was not easy to identify the most current information. This occurred where the information to the Department of Trade and the Registrar of Companies were provided about the same time (within a Month). Yet it differed. In such cases, both sets of information were taken to reduce more future problems in the field if one set proved unuseful.

5.5.4.1.4.1.2. Problems of Extracting Information for Selected Sample: Organisation of the Filing System in the Registrar of Companies

Similar but more perplexing experiences and problems of extracting information were encountered in the Registrar of Companies. Theoretically, the Registrar's department had an alphabetical card index system based upon the name of incorporation and of business name registration. But in practice it was chaotic to say the least. First, some firms which had changed status by being incorporated, still appeared under business name list. This information was known only after a file had been pulled out.

Second, some firms' names were not written on a single card, but several names were written on the same card, often not in alphabetical order, but anywhere on a card where there was enough space to squeeze in a firm's name.

Third, such several cards belonging to the same alphabetical group or product category were stapled together even though the names might have been different. Fourth, cards had been mutilated though usage to such a degree that some file numbers or names of firms were illegible.

The process of locating files after obtaining the file number had also been deliberately made onerous, sometimes impossible. First, filing cabinets containing serial file numbers were haphazardly organised. Second, other files were scattered on

the floor, in the main reception / working area and in the cashier's office. Third, many files were dumped on top of cabinets with no order at all, but left to gather dust for years. (This was in spite that Zambia has been bestowed with many trees).

Thus after identifying a firm's filing number, it was still a long process before a file could be found for copying. Coming back to the first point of misplacing filing cabinets, after asking the supervisor for a particular file number, she would say, "oh! there was no space for a cabinet after that serial number ended, so we have put the cabinet in that corner."

Some of the files found on the floor when the preparation for sampling frame started, were still lying there when the researcher left after two Months.

They would then ask us to try to look for files from one or two of such piles. Sometimes when searching was done, files were found on a pile or after attempting two or three piles. At other times files were not found.

Even after finding such a file, it was sometimes disappointing to only discover that the firms whose name the researcher had been frantically looking for had been struck off the register. At other times, this information about a firm being struck off was available from the card index.

Still at other times, when files could not be located, there was no alternative but to fall back on the Register of Companies books. Again all these were merely heaped on the floor for lack

of shelves. Registered incorporated company's or business' names were always found. The only discouragement to using them often was that the data provided was stale as it reflected the information as was supplied upon registration, most of which was not current. In desperation, such information was then taken hoping to make the best use of it.

It is no wonder that the researcher took two Months to prepare the sampling frame instead of two weeks planned for before field work began.

It was not only this researcher who faced the problems highlighted above in searching for files in the Registrar of Companies, but also the staff themselves. At many times, members of the public who would even had paid an inspection fee for a particular company's records, were turned away several times to give them "time to process". At the worst, sometimes customers became so frustrated and persistent that the staff invited them to look for their own files from a heap of files just to teach them a lesson. At a few times, they were jubilant when they found them. Most often they had no alternative but to give up.

After the end of the project, the researcher interviewed the supervisor regarding the status of affairs in the Registrar of Companies. She conceded to most of the points raised. But she added that the issue had been raised several times with higher authorities, including the need for a computerised system. But such requests had fallen on deaf ears. She continued that the basic problem advanced by the higher authorities was lack of funds.

5.5.4.2. LESSONS AND PREPARATIONS FOR FIELD WORK INTERVIEWS

A lot of lessons were learned from the experiences encountered in preparation of the sampling frame, selecting the sample and extracting information from firms' files. It became clear that a lot of difficulties would be faced in tracing principal places of business of firms. This was particularly so since information was not so clear cut in some cases. This resulted in obtaining two addresses. It was therefore anticipated that some firms would have to be checked at several places before finding them.

In order to facilitate the searching process, it was decided to obtain street maps, plot maps and maps for farming areas. Supplies of street maps which had not been in existence for over 10 years had just been received from London publishers for Lusaka and Kitwe only. More were expected by January, 1987 for Ndola, by which time the fieldwork would have been accomplished. Efforts to obtain even sketch plot maps for Ndola proved fruitless as there was none in the Survey Department of the Ministry of Lands. Attempts were made to get a copy from a negative. But the negative could not be found. So firms in Ndola were found by merely random walking and asking for names of streets, buildings where firms were housed and locational areas. Without the good knowledge of Ndola town and responsible attitude of the research assistants based in Ndola, fewer firms would have been interviewed. This would have been so because even where maps were available in Lusaka and Kitwe, great difficulties as discussed later were encountered in finding firms.

As for Lusaka, plot, town planning and farming areas maps were obtained. One problem with farming areas maps was that only farm number was indicated, giving only a general direction of very large farms, making it difficult to know where to begin searching from.

In the research proposal, it had been planned to telephone firms to arrange for appointments. However, the researcher was forced to abandon this plan after he was convinced of the lack of or inefficient telephone system prevailing in the country. It was feared that this process alone could take over a year. It was decided to send introductory letters to businessmen instead of telephoning them. Using telephone was to be limited to desperate situations where efforts to trace a firm by other means had failed but a firm's telephone number was available. The fear and the decision were based upon the researcher's experiences of using the University of Zambia, Lusaka Campus telephone system to contact research assistants locally and in other towns. This showed that it took up to 30 minutes to wait for a local call to get through and anything up to one hour or so to make a trunk call. Attempts to make use of one of the 3 public booths (usually out of order) at Lusaka Post Office revealed even more perplexing situation. Public telephones were hardly available even in the capital (allegedly due to vandalism). There were less than 10 public telephone boxes in the whole city. There was one manned efficient telephone office with two extensions at Lusaka Post Office. But these were reserved for making international or inter-town calls and there were always long queues of customers waiting to make calls. No local calls were entertained even if all the other three public boxes were out of order. At a few

times, when in great need, the researcher had to plead for the use of a private staff telephone from a supervisor of the telephone section. The same situation existed in Ndola and Kitwe. The telephone system at the Copperbelt University was however more efficient.

An introductory letter was therefore sent to each of the businessmen (see Exhibit 5A5.18). Enclosed with the letter was a one page extract from the questionnaire, containing several factual questions relating to levels of employment since it was operational, number of managers in the firm (any person in charge of a group of others), number of managers reporting to owner or MD., total assets in the firm, anticipated increase in the number of employees by the end of 1986 and in 1987. The owner was asked to complete it before the date of an interview (Exhibits 5A5.19 & 5A5.20). Other documents enclosed were letters introducing the researcher from the Dean of SBIS (Exhibit 5A5.21) and the Federal University Office (Exhibit 5A5.22); and authorisation letter to conduct the research from each of the three respective councils where field work was to take place (Exhibits 5A5.23, 5A5.24 and 5A5.25).

5.5.4.3. FIELD WORK EXPERIENCE: RESPONSE RATE AND REASONS

Out of the total net sample of 396, a total of 48 letters were returned undelivered by the Post Office. A total of 8 businessmen turned down the request for an interview while only 10 accepted. The main reason, accounting for about 95% of the cases, for non delivery of the mails, was "wrong Box number/address or person not known to this address". About 3%

were undelivered due to insufficient addresses. In about 2% of the cases, delivery had been tried. These messages were stamped on top of the envelopes. A few letters were opened then returned with some message. One such example was a letter addressed to Ms L.Y. Moonga of Ms Lyn's Knitting Shop in Lusaka, returned with a note by the owner of the Post Box saying that the addressee who was using his Box number, had passed away two years back.

It was not possible to know whether the other letters had been delivered to the right persons or not. If so, why they had not responded. It was possible that some may have been misdirected and consequently were received too late. One such case was Zanimwone Tailors Limited, a Kitwe firm who were written to on 5th August, 1988. They replied on 17th September, 1988 stating (see Exhibit 5A5.26):

> The questionnaire was received late - it had been sent to a wrong address (Kalulushi) before we received it through our Land Lords a couple of weeks ago.

About half of those interviewed later acknowledged having received the introductory letters.

In general, in spite that businessmen were always found very busy, the research teams were accorded warm and cordial reception. Many were very enthusiastic and interested in sharing their experiences especially when they knew that the study was more about learning than helping them.

Ackson Lungu, a research assistant, from Kitwe also observed that although some respondents were suspicious, evidenced by the way they spoke during the interviews, many were

> free and happy especially that we took the trouble of going to find out how their businesses operated.

He however acknowledged that lack of time since the questionnaire was long was a hindrance to securing quick interviews. He said:

> Whenever we told the respondents how long the interview was going to take, they exclaimed saying that this was a lot of time for a businessman, with their usual saying 'time is money'

Aokson Lungu mentioned two other problems, the first was the difficulty of finding the respondent in office. The second was apparent ignoring of the presence of the interviewers in preference of customers or friends. The researcher had expected these and had warned assistants of them since as researchers we were merely begging for his time (see Appendix Exhibit 5A5.1 - Guidelines to Research Assistants). These were experienced by all of us to one degree or another. These experiences are referred to throughout this section in order for other researchers to be aware of what to expect when conducting similar studies or using similar methods in Zambia. On failure to find him in the office, Lungu Aokson wrote:

> You would go there a number of times without finding him. A secretary would arrange for an appointment, but when you go there, you are told he left say yesterday or this morning. It would take a lot of time before you finally conduct an interview.

As regards interviewing businessmen at their homes, the researcher felt very uncomfortable about this at the beginning of the research process. In a particular case, attempts had been made by a the research assistant to contact the person but in vain. He therefore decided to wake up at 5:30 hours on a Saturday morning so that he could find the respondent at home. He successfully interviewed him just before 7:00 hours. At the first thought, the feeling of the researcher was that it was not very appropriate as it was too early. But he could not tell the

assistant for fear of discouraging. He was only advised to weigh each situation before making a decision. The researcher believed that the method could not be condemned if it was the only available alternative.

These researcher's initial apprehensions about intruding into people's privacy at their residential homes early in the mornings or late in the evenings or weekends soon withered away. As the interview process progressed, it was found that in many cases, it was the only method possible. With the exception of three businessmen, the rest who were visited at their homes after failing to find their business premises were very willing and enjoyed to be interviewed. In general, there was good and warm reception accorded to the research teams at the residential places of respondents. These interviews were done in the most relaxed and informal atmosphere. They lasted longer than anticipated, sometimes twice the time as they went on narrating their experiences. Food, tea, coffee, soft drinks, wine and beers were offered to us. The research team in Ndola for example reported having been invited to a special dinner prepared for them.

As regards the three who could not be interviewed at home in Lusaka during weekends, One of the three persons invited the researcher to his office the following Monday. The second was very busy with family matters on a saturday afternoon, but he invited the researcher to meet him at his office the following day. The third, who was in charge of 60 companies, was found chairing a board meeting on a Sunday afternoon. This showed their willingness and helpful attitude to afford some of their time.

5.5.4.3.1. [redacted]

The final number of respondents actually interviewed was 218 out of 396 net sample. This was a response rate of 55%. Response rates for individual towns are shown in Table 5.4, ranging between 49% for Lusaka and 62% for Kitwe.

Hence, the achieved proportional distribution among the three towns departed from the theoretical proportions. The furthest from the theoretical to the actual was 13% for Lusaka, which was under-represented while the nearest was Ndola at 5%. But the actual were nearer to the net sample proportions, the furthest being Lusaka, with 5% and the nearest being Ndola with 2%. The highest response rate was in Kitwe with 62%. Kitwe was actually over-represented compared to the theoretical or the net sample. There were two explanations for the differences in response rates in the three towns. The first reason was due to firms being transferred from one town to another, thus increasing or reducing the original proportions. The second main reason was that geographically, Kitwe is a small, basically mining town. Most of the firms were located in two small main industrial areas, very close to one another. Hence it was easier to locate firms even through asking other people than in Lusaka, the capital, where the area covered was very large, a distance of about 40 kilometres from one furthest point to another.

The area covered in Lusaka, starting from the North, were: Mandevu Compaund and all the light industrial area along the Great North Road. Then in the North East, residential areas were: Kamanadale (Luneta), Northmead (Chikonkoto), Long Acreas (Kapila), Roma and Kalundu. In the East, the residential and farm areas

were: Chamba Valley, Chelston, Kabulonga, woodlands, Chilenje. In the South East, these were: Ibex Hill and Baulani (Leopards Hill). To the South these were: John Howard Compaund and Lilayi. In the Central these were (residential areas): Kanwala, Ridgeway, Kabwata, Libala and Chilimbulu. Then the whole of Light and heavy industrial area in the town centre. To the West, these were: Makeni farming area, Chibolya, Lusaka West farming area, Lilanda and Matero. Hence since the area is so large people do not know one another closely or easily.

The achieved proportions were however in proportion to the theoretical sample in that most firms were still interviewed in Lusaka, then more firms were interviewed in Ndola than in Kitwe in spite of the latter's high response rate. On the whole, in the presence of so many enormous odds, the response rate was deemed a success. It represented the business firms in each of the three towns, the localised urban area and the firms in Zambia.

The overall reasons for failing to interview the whole net sample in the three towns are now taken up in the next section.

Table 5.2. Total,Urban and Main Towns Manufacturing Firm Distribution

Areas	Total Number of Firms and Percentage Distribution of Firms in Zambia		Total Number of Firms and Percentage Distribution of Firms in Urban Areas		Total Number of Firms and Percentage Distribution of Firms in Sampling Towns	
	No.of Firms	% Distr.	No.of Firms	% Distr.	No.of Firms	% Distr.
Lusaka	1226	36%	1226	48%	1226	57%
Ndola	542	16%	542	21%	542	25%
Kitwe	382	11%	382	15%	382	18%
Other Urban Towns	396	12%	396	16%		
Rural Areas	870	25%				
Total Total	3416	100%	2546	100%	2150	100%

Table 5.3. Individual Towns Sampling Proportions

Town	Total Number of Firms in Town (a)*	Percentage Distribution to Total Firms in Zambia (b) col.(a)/3416	Percentage Distribution to Urban Firms (c) Col.(a)/2546	Percentage Distribution of Sampled Towns (d) Col.(a)/2150
Lusaka	1226	36%	48%	57%
Ndola	542	16%	21%	25%
Kitwe	382	11%	15%	18%
Total of three Towns	2150	63%	84%	100%

* NB. Calculations:
b = Col.(a)/3416; c = Col.(a)/2546 d = Col.(a)/2150

3416 = Total no. of firms in Zambia (from table 5.2)
2546 = Total no. of firms in Urban Areas (from table 5.2)
2150 = Total no. of firms in sampling towns (table 5.2)

Table 5.4 Theoretical, Gross, Net and Actual Samples and Percent Distribution

Sampling Area	Actual No. of Firms & % Distribution in Sampled Towns		Theoretical No. & % Distribution of Firms to be Sampled		Gross sample of Firms Selected for Interview		Net sample of Firms Selected for Interview		Actual No. & % Distrib. of Firms Successfully Interviewed		Response Rate: No.Interv / Net Sample
	No.	%	No.	%	No.	%	No.	%	No.	%	
Lusaka	1226	57%	308	57%	223	50%	193	49%	95	44%	95/193=49%
Ndola	542	25%	135	25%	125	28%	111	28%	66	30%	66/111=60%
Kitwe	382	18%	97	18%	101	22%	92	23%	57	26%	57/92 =62%
Total	2150	100%	540	100%	449	100%	396	100%	218	100%	218/396=55%

5.5.4.3.2. Reasons for the Achieved Response Rate

Thus the firms that were not located were 178 or 45% of the net sample of 396. While this was seen as an unfortunate occurrence, this was however a surprising discovery of what happens in the real world. It was an amazing finding because this number did not only include firms registered under the Registration of Business Name Act, CAP. 687, but also limited companies incorporated under the the Companies Act. The companies Act for example, requires that any changes in the registered principal place of business or particulars of directors should be submitted to the Registrar of Companies. The Registration of Business Names Act, sections 3 and 5 also requires, *'inter alia'*, that every firm or individual having a place of business in Zambia:

> shall furnish ... to the Registrar, a statement in writing ... containing the following particulars:
> a) the business name;
> b) the general nature of the business;
> c) the principal place of the business.

Further section 8 demands that:

> Whenever a change occurs in any of the particulars registered in respect of any firm or person such firm or person shall, within fourteen days after such change ... furnish ... to the Registrar a statement

effecting the changes.

Failure to comply with this regulation would result in the firm or person being liable to pay K15 for each of the days that this remains unfulfilled as per section 9. Under Section 15 the persons who were partners in the firm are duty bound

> to send ... to the Registrar notice ... that the firm or individual has ceased to carry on business ... within three Months [failure] to do so [would result in] a fine not exceeding one hundred Kwacha.

The same section empowers the Registrar to remove such a

> firm or individual ... from the register ...where the Registrar has reasonable cause to believe that any firm or individual ... is not carrying on business.

The companies Act also demands similarly for incorporated firms.

Yet 63 of the firms not found were limited companies. This represented 15% of the net sample and 35% of all the firms not found. Of these the number of limited firms that had closed or transferred were 33 (or 8% of the net sample and 18% of the firms not located). In addition 39% of the respondents interviewed owned firms (both limited and unlimited) that were found at a different place other than the registered principal place of business. Further more, 8% of respondents interviewed were owners of firms which had closed down. Still further, 20 (or 13%) of the respondents interviewed were owners of firms that had never been operational. But all this information had not been lodged with the Registrar of companies. Yet the companies Act demands that a firm that is not operational within six Months after being incorporated should be struck off the register.

In the light of the inefficient organisation of the filing system in the Registrar of Companies, that was discussed above, it should perhaps not be surprising that effective implementation of these requirements has not been easy.

Coming back to the full discussion of the explanations for failing to interview the other businessmen in the net sample, the main reasons were mainly four, sub-classified into ten. The basic four were first, failure to locate the registered place of business. Second, business was closed down or premised were

vacated. Third, owner was on leave, ill or busy. Fourth, there were outright refusals. The ten sub-classifications were:

1) failure to locate premises;
2) failure to locate premises, but tried telephone number;
3) transferred from the town of study;
4) firm confirmed to have closed down;
5) registered office/residential house located but firm could not be found;
6) previous registered office or residential home located but owners dead, moved or evicted;
7) owner stays in two different town;
8) refusals;
10) firm was a retailing business.

Each one of these will now be explained.

1. Failure to Locate premises

Some firms could not be interviewed because of failure to locate plot numbers of their principal places of business or the residential home plot numbers. The number of firms were: Lusaka 38 (limited firms:13); Ndola 8 (limited firms:4) and Kitwe 4 (limited companies 2). The reasons why plots could not be located were several.

First, the farm areas on which some business firms were situated were so vast and so general that finding the farm buildings proved difficult. All that was available was a number of the farm on the map, with no road numbers or names leading to the farm. No visible farm demarcations were available to help in tracing the premises. Assistance was sought from the Ministry of

Lands to be given a person to help in identifying premises, but they were not able to provide anybody. Identification of farm buildings therefore made great use of inquiries from anybody met or other farmers.

Second, a couple of names of roads, even in residential areas, on which businesses were allegedly located did not exist as for example Mwanamulwa road in Thorn Park, Lusaka.

Third, industrial plot numbers could not be physically identified though they were shown on town planning maps. This was particularly so in Lusaka's Chinika light industrial area where some plots had not been developed. It was therefore not easy to determine plot demarcations in order to pin point the plot numbers of undeveloped and developed premises.

Fourth, most developed plots in industrial areas were not numbered at all. Where names of firms were not displayed, particularly where some firms existed within a firm, using premises of other firms or parent companies, identification of firms was extremely difficult. This problem, of not indicating plot numbers on buildings, also applied in town centres. The research team had to rely on asking surrounding businessmen operating from buildings, proximate to the features shown on the map, where such and such a plot number was. Sometimes these inquiries were made just to have an idea of where we were in relation to the plot numbers being sought for. In many cases, where employees only were around or where owners were available but premises were rented, it was surprising to note that even these did not know the plot numbers their own firms were housed in.

Fifth, in other cases and in cases as in the last one, names of firms were not displayed on the premises. This was particularly so for very small firms which rented and shared office or factory facilities, sometimes several within a single room. So it was difficult to locate them.

Sixth, sometimes, house numbering system was so chaotic and unsystematic that it was difficult to find the sequence of numbers. The serial numbers changed or stopped short of a few numbers from the one being looked for abruptly that efforts to locate the number proved fruitless.

In all the above situations, all efforts were put into attempting to locate the firms. Great use was made of the generosity of passers-by, other company's officials, or residential neighbours in tracing industrial and residential plots and house numbers. Great assistance was also received from Lusaka District Council, Housing Section in Kabwata and Chilenje. They provided an employee to help in identifying residential house numbers in their sections. We were referred to National Housing Authority for another section under their jurisdiction. A different person was provided to assist in a different section. Still in other cases, United National Independence Party (UNIP), the ruling party in a one party state, gave us some guides for a couple of areas in chilimbulu residential area. In those few cases for residential areas, these guides where available, were able to identify almost all of the plots. The next problem was that when the previous owners were discovered to have moved, we had to start all over again to find out where they had moved to.

Sometimes, further inquiries led to success. But at other times they had to be abandoned. The two research teams on the Copperbelt reported and recorded (in their note books) similar problems and stamina in attempting to locate firms. A research assistant Mr. Reggie Phiri in Ndola wrote:

> On 17th October, I went to town to a restaurant run by a brother of Mr. Bowa of Bowa Milling. I got some information about his [Mr. Bowa] residence. ... I went to Kanseshi and discovered Mr. Bowa's house. I left a note proposing to see him the following day on 18th at 7:30 hours. ... On Saturday 18th October, I went and interviewed Mr. Bowa at his house.
>
> Gem Industries - had residential address only. I went to the house [which] had new occupant, who did not know where the previous owner was...

Other research assistants, in Kitwe experienced similar difficulties of locating premises and exerting efforts in attempting to locate them.

2) Failure to Locate Premises, But Tried Telephone Number

When a firm's premises was not located as in (1) above, efforts were made to telephone the business using the telephone number obtained from the company records or from a telephone directory. But it went to a wrong place. Again in a few cases this proved successful. The number of firms in this category were: Lusaka 8 (of which 5 were limited companies); Ndola 5 (limited companies:4) and Kitwe 3 (limited companies: 2). On using telephones, research assistants also experienced the same problems that were mentioned earlier. Reggie Phiri, a research assistant in Ndola, for example narrated:

On Crochet Knit Textiles:

> [I] could not locate it. Telephone led me to a different residential house who did not know anything. ... Tiyende Bottling Company - phone led to Trans Ocean Ltd. who did not know anything about the company.

3) Transferred From the Town of Study to a Different Place

Some firms were not interviewed because they had transferred from one town to another among the three towns of the study or to a different town or province. These were: Lusaka 4 (limited:3); Ndola 9 (limited:6) and Kitwe 7 (limited 6). In some cases, these were followed up and were successfully interviewed. In others, such efforts proved fruitless. Beatrice Mutati, another research assistant in Kitwe reported a company that had moved to Mansa. Phiri from Ndola also wrote:

> On 15th October, I went to Mushili Site and Service to look for M.M. Manufacturers. I managed to locate the house of owner Mr. Kabanga. The boy who kept the house told me Mr. Kabanga stayed in Chimwemwe, Kitwe. ... He had no definite days [that] he came to Ndola. ... On 23rd October, I went [to get] more information ...and discovered that he stayed at House No. 8150/1 Chimwemwe, Kitwe.

Another case was African Paint Company, owned by Lonhro (Z) Ltd. The firm was originally in Kitwe. After failing to locate it, it was decided to look for it in Ndola, the second address obtained from the Department of Trade. New leads in Ndola showed that the firm was in Lusaka. Inquiries were made at Lonhro house in Lusaka from the reception by the researcher. But the three ladies found there had no idea about the firm. After persistent inquiry, the researcher was referred to a notice board were all Lonhro firms registered at the Head Office were listed. Surprisingly the firm's name was there. Requests to see the Managing Director or the factory revealed that there were no office or factory for such a firm, but that the firm was a dormant one.

This was however surprising since the firm was registered in 1965 and got the manufacturing licence in 1981. The box number

and telephone number obtained from the Registrar of Companies were for Kitwe. But later information from the Department of Trade showed that the firm was in Vitanda Street, in Ndola. Further requests to see the Chairman for Lonhro in Zambia, proved were fruitless. So the firm had to be abandoned. There were similar cases of this type.

4) Firm Confirmed to Have Closed Down

Another major reason for for failing to interview some firms was that they were said to have closed down by neighbouring businessmen or people known to them. In other cases, deserted or sold buildings were found. In many of these cases since owners had left the country or their whereabouts were not known, following them up was found impossible and these firms has to be forgotten about. The firms falling in this group were: Lusaka 8 (limited companies:3); Ndola 5 (limited companies:3) and Kitwe 2 (limited companies:1). But as in other situations, all efforts were made to verify this and attempts were made to search for such firms. In fact 8% of the respondents were owners of firms which had closed down. In addition, about 13% had registered organisations which had never operated. Yet in both situations the owners were traced and interviewed.

Similar experiences were reported by research teams on the Copperbelt. Beatrice Mutati in Kitwe wrote the following on Solar Energy Systems:

> The company ceased operation a number of years back and the owners [have] gone to England.

5) Registered Office /Residential Home Located but no Firm

Some firms' registered premises / or residential homes of owners were located but the firm could not be found. The owners were dead, or had moved or had been evicted from rented offices or nobody knew their whereabouts. Some of these used lawyers addresses, but the later knew little or nothing about the owners. These were: Lusaka 24 (limited companies, 7); Ndola 2 (limited companies 2) and Kitwe 3 (limited companies:2). But as above, some leads given about their company's present location or their residential premises or their working places if they were in full time employment, were followed. In some cases owners were found and interviewed. About 16% of the respondents, for example, were in full time employment.

The researcher and the Lusaka assistants for example found an old abandoned falling building used by Chelstone blocks, after inquiries from around the geographical location sited from the map. The researcher was told that the company closed down after many burglaries into the premises where concrete blocks were being stored. But the whereabouts of owner were not known. In another case, the buildings for Prestige Engineering Co. Ltd. in Mukwa road, Lusaka were also found. But it had been sold to Bata Shoe co. Ltd. Inquiries from Bata about where the owner could be found bore no fruits. In still another case, the residential house of an owner of Pencil Manufacturers Co. (Z) Ltd. was found in Chelstone, but the owner had passed away. A similar situation was found to be true for Masonde Industries Ltd. whose former registered business premises were found. But one of the two owners had passed away while the other had moved to Kabwe (a

different distant town), according to the brother in law of the deceased person.

Similar experiences were narrated by the Copperbelt research assistants. Reggie Phiri, From Ndola wrote:

> Gem Industries had only residential address, [I] went to the house [which] had new occupant who did not know where the previous owner was.

7) Owner Stays in Two Different Towns

Some business owners were not interviewed because they stayed in two different towns. Consequently securing an interview proved difficult (These were 2 in Ndola). An example was Mr. Kabanga, the owner of N.M. Manufacturers, who stayed both in Ndola and Kitwe.

8) Owner Unable to be Interviewed

There were also cases where a business' premises and firm were located. But the owner was on leave abroad, ill or was distressed or was genuinely busy during the period of the study. After several visits to the same firm or several appointment cancellations, it proved difficult or impossible to interview the owner. It however sometimes took up to eight visits to secure a successful interview. Some firms were given up when it was desperate. The numbers of these firms were: Lusaka 8, Ndola 4 and Kitwe 4. In one case, the researcher had to indefinitely cancel an interview, after postponing it three times. The owner was in a terrible psychological instability due to a possible collapse of his business. It was thought that it would be inhuman to press for an interview. Results from such kind of interviews, where some questions were attitudinal, would also be doubtful.

It is worthwhile mentioning and understanding that when businessmen said that they were busy, most often this was genuine especially for private small businesses. This was so because the same man could be in charge of the administration, the factory, finances etc. In other situations, he was heading many firms. Sometimes they were found so busy, supervising deliveries from vehicles or in the workshop, or receiving many customers or attending to telephone calls that it was often found difficult even to interrupt and introduce the purpose of the mission. An illustration will emphasise the point.

A Kitwe firm was referred to us for interviewing the owner who was staying in Lusaka. After several attempts to locate the registered office in Lusaka had proved fruitless, it was decided to go to the house of the Managing Director, referred to above found chairing a meeting on a Saturday afternoon. The meeting was to go on up to about 19.00 hours. After that he was scheduled for another appointment. On Sunday, he was scheduled to meet a person who managed one of the farms of the conglomerate organisation. On Monday, he was leaving for the Copperbelt to visit one of the firms in Kitwe. Then on Thursday, he would go to Ndola from Kitwe. Attempts to see him in Kitwe where the researcher was at that time did not materialise.

Similar experiences of owner being unavailable were found by the Copperbelt research teams. Reggie from Ndola also said on another firm after having spent a lot of effort to trace it:

> On 19th October, I went to see owner of Conveyer Services. I was told he was out in South Africa and would not be back until Wednesday or Thursday the following week. ... On 27th October, I went to Conveyer Services only to be told [that] the owner had left for London to see his mother who was very ill for at least two weeks.

9) Refusals

In a few cases (a total of about 13), some respondents refused for fear, or ostensibly being busy, or because it was against company policy or (in one case, because other University lecturers had not sent them feedback on the results of previous interviews (Mr. Cook was mentioned)).

10) Retail Firms

Three firms which had already been selected and located turned out to be retail firms instead manufacturing, according to Kitwe and Ndola research assistants. It was decided to leave them out. These were: Ndola 2 and Kitwe 1.

5.5.4.3.3 Supervision of Research Assistants

It may have been noted from quotations of research assistants that they knew and understood what was expected of them, and the importance of the research project. Further, they also showed maturity, responsibility and honesty in their work. If they did not work, for example, they noted it and reported when we met even though they knew that they would not be paid for the days they did not work. The experiences of this researcher contradicted initial fears expressed by experienced researchers in the U.K. that using university students as research assistants result in questionnaires being completed by themselves on the roadside. To illustrate the point, Reggie Phiri, for example, was honest to report that out of four consecutive days, he worked half a day only. He also showed commitment by working half a day even though he was not feeling well. He wrote:

> On 29th September - did not work, was sick. On 30th September, I worked half day to fulfil appointments with Mwana Textiles and Benamart Factory - postponed [appointments]. I fell sick again and went back home. ... On 1st October, I did not work [as I was] still sick. On 2nd October, I did not work [as I was] still sick. On 3rd October, I worked. ... On 4th October, I went to fulfil an appointment at 8.30 with owner of Mwana Textiles. [He] showed [up] around 10.50 hours [and] had an interview.

The other research assistants, Beatrice Mutati and Lungu also reported similarly, the few times they were ill or were unable to work.

The research assistants also showed courage. During the fifth week of the field work, the two research assistants based in Ndola were almost shot at in the afternoon when they went to a farm in Minsundu area, near Zaire. They were suspected to be thieves. This area was frequently terrorized by armed criminals. Not only suspecting danger, but also to create confidence among the respondents in that area, they asked for permission for the two of them to move together while interviewing respondents in that area.

The owners of the farm were away that day. But when they were driving in they found the two assistants inside the yard. After by-passing them, one of the assistants went forward to explain about their mission. But he was challenged with a gun not to go nearer or else she would shoot. The research team in Lusaka did not face such kind of problems because of the labelled official University car that was used. Whenever respondents doubted the true motive of the research team, they were referred to the car.

Commitment to the research project was further shown by one of the two Ndola research assistants, Samson Sakala, when the researcher was in need of an extra assistant in Lusaka. Samson did not have any relatives in Lusaka nor did he know anybody or the town as he had been there twice only for games at the University campus. Yet he agreed to go and stay with the researcher's brother and help in locating and interviewing Lusaka respondents for three weeks. He proved to be as good as he had been on the Copperbelt in locating and securing appointments with businessmen.

Supervision of the Copperbelt research assistants was regular though not too close nor on a daily basis. But the research teams were called to meet in Kitwe to review the progress and discuss problems they were encountering. Advice on how to solve them was given. Their accomplishments were also revised, including the number of interviews achieved. The researcher thanked all of them. A special applause was given by all present to an assistant with the highest completed interviews. In addition, the assistant with the highest interviews was rewarded an equivalent of four days' pay at a daily rate of K10. Since it was realised that achieving the the initial goal of 5 interviews per day or even the revised rate of 3 interviews per day, was difficult (bearing in mind all the insurmountable problems enumerated above), at the second meeting it was decided to reward all the research assistants according to the efforts they put in . The next high achiever was therefore given monetary rewards equivalent to two days. The third one was given one days pay while the last was given half a days pay. This was done to boost their morale and motivate them and to reward

the high achievers. During the first 3 week period for example, a total of 72 firms had been located on the Copperbelt. But 42 or 60% had been interviewed.

The researcher also went through their questionnaires, later. Two basic purposes were first to check whether they were properly completed. Although dishonesty in completing questionnaires for respondents not actually interviewed was not suspected, two checks were made. First, the manufacturing category of the responding firm ticked on the questionnaire was compared with the recorded ISIC classification to determine whether they matched. Second, a few randomly selected respondents purported to have been interviewed were visited to verify. Of these, there was not a single case that was found to be untrue.

Supervision of research assistants in Lusaka was closer as the team met every morning to map out the day's itinerary. Sometimes research assistants were left to conduct or continue an interview after a respondent had been located. At some other occasions, each of them was dropped in an area where registered premises were close together for a few firms which they were supposed to locate and interview. In most cases, there was at least one person with the researcher. Often the team met at lunch time and again at rendezvous places for picking the assistants who were not with the researcher and drop them nearer to their homes or at bus stations or on few occasions take them home. On the whole an average of 2 full interviews per Person were achieved in Lusaka.

5.5.4.3.4 Some Administrative Problems Experienced with Lusaka Research Assistants

Three research assistants resigned in Lusaka during the course of the study. One female assistant stopped abruptly, without giving any reason but by stopping to report for work, after working for one Month compiling the sampling frame. Two male assistants resigned after having worked about three weeks in the field interviewing respondents. They wanted to be given luncheon money in addition to the daily rates because other students who had done similar work previously were allegedly given food money. Second, they did not want to account for transport money advanced to them. The researcher could not meet both demands as he was short of money through out the research study. Further, the University itself required him to account for all research finances advanced to him. He explained the position and pleaded with them to stay. Two days later one of them claimed to have been offered a job by a company after he decided to leave. The researcher had to regrettably let them go after they declined all pleas. Two new students offered to take their places. But as there was no time to train new recruits, they were not taken on. Instead, one research assistant from Ndola was asked to be based in Lusaka as explained above. He proved to be as responsible and as hard working as he had been initially in Kitwe and later in Ndola even though he was not familiar with Lusaka.

5.6. SUPPORTING AGENCIES QUESTIONNAIRE

The potential and actual small business supporting organisations selected for interview were 23 key institutions. The unstructured personal questionnaire interview aimed at directors, managers and civic leaders of actual and potential small business supporting organisations was applied, using expert opinion method. Questions were centred on certain important issues. These were considered to be representative of the main institutions that would influence policy changes in the small business field. They were all written letters seeking for an appointment at a suggested time. A few responded by letter or telephoning the researcher's working place or residential home suggesting other days or times. But when those who did not reply were later visited for an interview at the suggested times, several claimed to have been unaware of the letter. For some organisations, letters were found after some searching in departments, having been filed away. Hence due to time constraints and unavailability of the executives, as interviews had been postponed several times, the overall response rate for potential and actual small businessmen supporting agencies was 17 out of 23 (73%). The classifications and the individual response rates were:

a) 2 out 3 (66%) Government representative organisations namely, Ministry of Commerce, Bank of Zambia Small Business Department;

b) 2 out 2 (100%) government and private small business supporting agencies i.e. SIDO AND SEP;

c) 6 out of 10 (60%) financial organisations i.e. commercial banks that existed in Zambia. These were Barclays Bank, Standard Bank, Grindlays Bank, Citi Bank, Bank of Credit and Commerce and Zambia National Commercial Bank;

d) 7 out 8 (88%) major councils in the Urban areas, the two provinces where small businessmen questionnaire was conducted. These were: Lusaka Urban District Council, Ndola Urban District Council, then Luanshya, Kalulushi, Mufulira, Chingola and Chililabombwe District Councils (see map on Exhibit 5A5.1).

5.7 PROBLEMS OF ADMINISTERING THE QUESTIONNAIRES

Most of the major problems faced during the research process have already been discussed above in various sections. These will therefore simply be summarised and new ones briefly presented.

1) Lack of current addresses

The main problem in the graduate questionnaire, was obtaining the current addresses of SBIS graduates. But assistance was ultimately obtained from former colleagues, employers, relatives, lecturers and personal contact with graduates themselves or their friends.

2) Preparation of sampling Frame

The most serious problem in the businessmen questionnaire, was the preparation of the sampling frame. This was particularly problematic because there was no readily available Government Directory of manufacturing firms. The possible danger was leading to a biased sample *'vide supra'*

3) Difficulties of using filing systems

The resulting brain-teaser from lack of directory was the difficulty of using the filing systems in both the Department of Trade and the Registrar of Companies.

4) Lack of information on closures

Due to the inefficient filing systems in the two departments, the major uncontrollable consequence was lack of information on firm closures, locational changes in firms or owners since registration.

5) Adopted methodology

A major limitation related to the previous one and compounded by lack of proper sampling frame and relevant data information base, was the adopted methodology of interviewing sampling units in collecting employment data. The weakness was that by definition, the majority of respondents were existing firms. Therefore many liquidated large companies and insolvent small businessmen or abandoned small firms could not be included in the sample to determine real net job creation over the 20 year period. The result was underestimation of the actual job losses. This might have been more serious for small firms whose closure rate is very high as research evidence elsewhere has shown.

6) Failure to Locate Firms

As expected, these complications led to failure in locating some firms. The puzzle was partially solved by relying on inquiries on current locations of the responding firms or their owners, from passers-by, nearby businessmen and residents, District councils, National Housing Authority and UNIP (the ruling party).

7) Lack of street maps

Lack of street maps and appropriate sketch or town and country planning maps. As a result, in locating roads and searching respondents, in Ndola and farm areas, great reliance was again made of passers-by, residents and other respondents when interviewing them, and random searching. But all roads that were existing in town centres and residential areas were eventually located. Even where sketch maps were available, plot numbers presented problems.

8) Securing interviews with Businessmen

Other troubles related to difficulties of securing interviews due to very busy executives, cancellations without any notice and several trips (up to seven) to the same person before an interview was successfully held. Interviewing small businessmen Interviewing small businessmen is a difficult task requiring a lot of skill, effort, time and money in locating them and securing their co-operation in sacrificing their time to give adequate responses to a research whose results they could have considered as being illusory. This was compounded by the fact that the research was not an official government enquiry. In general Other problems may arise from partial answers, or no response at all, or inadequate (biased or distorted) or irrelevant or verbalised responses as, for example, where a businessman could not accurately remember the amount start up capital.

Some of the problems were however, partially solved by getting introductory letters from District Governors (DGs) to

allay some fears. It could be argued that this action may have had opposite effects because the businessmen might have misinterpret it to imply that government policy had been more effective and give favourable responses. Others might have given negative views simply because they did not like government policies. Another view could be that they might have given falsified responses for fear that their responses would result in "inviting unwelcome attention from tax authorities" as has been reported in U.K. (Bannock, ed., 1985:xiv). False responses could also arise simply out of fear that they may find themselves in political turmoil, perhaps contravening the leadership code.

While such fears are genuine and could not therefore simply be dismissed outright, there is however a difference between getting a letter of permission to conduct research and carrying out government research. In any case, written express permission from the DCs is required in order to conduct research in residential and business zoned areas in Zambia.

However attempts were made to allay such fears by informing the businessmen that their contribution was useful in assisting SBIS provide courses in small business and that the researchers were there to learn from their experiences. They were also told that they were ultimately assisting developing Zambia. A letter was sent beforehand to arrange for an appointment where personal contact beforehand was not possible. If a businessman is very busy, an offer to go back later was made. In addition, there was also a need to be courteous, understanding for their misgivings, giving them personal assurances for anonymity and confidentiality of their answers. Explanations as to why the research is being

conducted and above all thanking them for sacrificing their time at the end of an interview created good rapport and confidence.

9) Use of students as Research Assistants

A problem, considered very minor in this research study, which was raised in the initial stages of the research proposal was the use of second and third year SBIS students as research assistants. The obvious reason why this was decided upon was that personally interviewing close to 400 businessmen, in addition to the other respondents was an impossible task. There were constraints of time, vastness of areas to be covered, transport and communication problems. If one day is required to complete one successful interview as advised by Professor Buchanan of the University of Glasgow, taking into account call backs, travelling etc., then 350 days or one year was required just to complete interviews.

Fears, for example that the students can complete questionnaires themselves on the road side, proved to be unfounded. Senior students appear to be reliable quotations in their diaries have been given above to show their honesty. It was shown that they worked on saturdays even though were not expected to. They recorded when they were ill even though they knew that they would not be paid. Other researches including internationally sponsored organisations such as ILO/SATEP, have made use of

> ... third and fourth year ... University of Zambia [students from] ... Lusaka campus and Ndola Campus in Kitwe.

Their job was even more complicated as they were also responsible for preparing the sampling frame through random walk since they were (Haan, 1982:13)

> ... asked to locate as many manufacturing and repair activities as possible.

These researchers had not reported any problems encountered. In fact it is important to note that the interviewers were reliable enough to make efforts (Haan, July, 1982:18-20) "... to trace part-timers on a few saturdays" on their own.

Two explanations may be advanced for this tendency of reliability. First, it is possible that morality among some university students is still quite high. Second, most research in Zambia is conducted by lecturers. Students may therefore feel morally bound to do a good job for their lecturers as a token of appreciation. Third, there may also be a feeling of the need to render good service for payment received.

However in order to reduce some of the likely problems, the research assistants were expected to conduct a few interviews per day.

In order to reduce the possibility of interviewer bias, research assistants were given briefing and training in the purposes of the research, methods of conducting interviews as explained earlier. Further they worked under the supervision of the researcher initially (for Copperbelt assistants) and throughout the period for Lusaka assistants. Still further, their work was checked by going through each completed questionnaire to at least spot blanks and wrong coding. Surprise random checks were also made on respondents reportedly interviewed, by phone or personally calling on them.

10) Language problem

A minor problem that was anticipated and provided for, yet the solution was not water-proof, was language interpreting problems in a few cases of foreigners who could neither speak English fluently nor any of the local languages. The researcher had a couple of cases and two other cases were reported on the Copperbelt where interpreters had to be used to conduct the interviews. These took unusually long, between one and half hours and up to two hours.

11) Difficulties of interpreting five point Likert Scale

Difficulties of interpreting the questionnaire instrument relating to the five point Likert attitude scale on the leadership code (to businessmen) presented some confusion in the minds of respondents of the expected responses. The meaning of 5 point scale concept was not easy to grasp, as it appeared foreign to the less educated businessmen. Such concept does not exist in the Zambian culture and in the local languages. The scale was merely understood as "YES" and "NO". So the interviewer had to keep on reminding the respondents to state the level of agreement continually in spite of the fact that there were 10 statements only.

12) Tendency to avoid extremes on attitude statements

Besides lack of understanding the concept, there was a tendency to avoid extremes of the scale (strongly agree or strongly disagree) even among those who were well informed about the concept. When asked about the level, they would merely say "I just agree ... or disagree", sometimes indicating this through

their kinetic expressions. It is for this reason that in analysing these responses, it may be useful to view them as "YES" and "NO".

13) Suspicion of Researchers

Another minor problem on the Likert scale was the tendency of some respondents especially foreigners, and in particular of Asian origin, to be suspicious of the researchers in spite of assurances that it was a bona-fide research by an educational institution and showing them the supporting documents. Use of University official car, in the case of Lusaka, proved to be very convincing to the doubting Thomases.

For the same token, other than being in a hurry to conclude the interview, other respondents did not want to offer extra comments on the leadership code because of fear of being locked up by the government. The percentage of those who did not offer extra views was 44%. It was perhaps being over optimistic to expect more than half of busy businessmen making additional comments in a long interview which in most cases lasted between 40 minutes and one hour. In most cases, facial expressions indicated that they had touched on every issue. But in some cases it was not clear as they appeared hesitant. The many "not sure categories" may therefore not necessarily mean indecisiveness on their part, but fear. One Lusaka indigenous Zambian expressly stated: "I am not in government to comment on government policies". Another said:

> "I am not concerned with the code as long as the environment is conducive for me to carry on the business".

Their fears were perhaps genuine as shown by an Indian Zambian (one of the few respondents who declined to be asked questions relating to the code) in Ndola when he stated:

> "I am not prepared to waste my time on something which could see me behind bars"

It is therefore possible that had all the respondents had a free mind, the code would have produced more overwhelming results.

14) Resource constraints

Financial, facilities, time and human resource constraints were some of the most major issues throughout the research project. These were basically due to two reasons. First, University of Zambia (the sponsors) adopted a new policy, retrospectively, of discontinuing funding of field work in Zambia to fellows studying abroad. The second was the ambitious nature of the study, considering the funds and time normally available to research students. The researcher ended up partly funding field work expenses from personal resources, resulting in living on shoe string budgets.

In spite of the few sentiments on the code the experience of the researcher was that on the whole, trust had been earned by the time the leadership code section was tackled. As a result discussion of the code or continuation of the interview, by the few who did not want to respond on this particular section, did not present problems. Many were openly stating their views. Many were so happy and interested in the whole research study that by the end of the interview, their confidence had been won. This was manifested by the desire of 72% (157) of the respondents who voluntarily gave their contact addresses in order for them to receive a summary of the results of the study.

SECTION IV - EMPIRICAL FINDINGS, ANALYSIS AND DISCUSSION

CHAPTER 6 - ENTREPRENEUR AND ENTERPRISE FORMATION PROCESS AMONG POTENTIAL BUSINESSMEN (ERIS GRADUATES)

6.1 INTRODUCTION

Analysis of research results is done in five chapters namely, chapters 6 to 10 while chapter 11 presents discussions, comparisons, implications and recommendations.

Chapter 6 first introduces the urban population concentration problem. Detailed analysis is done in chapter 6 appendix 1 (6A1). It includes likely future expectations and its implications on the job market in Zambia and the need for creation of more small businesses. The data on urban population was based on students', graduates' and their parents' living habits as well as the respondents' home locational preferences.

The main body of chapter 6 presents a discussion of research findings on attitudes of potential businessmen (students and graduates) on enterprise and entrepreneurial formation.

6.1.1 SUMMARY OF METHODOLOGY AND RESPONSE RATES.

It will be recalled that a total of four surveys using questionnaires were carried out. One questionnaire was administered to businessmen through a structured personal interview. The total number of respondents actually interviewed was 218 out of 396 net sample. This was a response rate of 55% (see chapter 5 for details and reasons for such a response rate).

The second one was a postal self-administered questionnaire, sent to graduates of the University of Zambia's (now Copperbelt University's) School of Business and Industrial Studies (SBIS). A total of 254 out of 498 or a response rate of 51% was achieved. This was distributed as follows: First mail response (30%), second mail response (15%), third and fourth overseas's mail response (6%). This was considered to be a very high response rate. The sample was also regarded as representative, across all the years and the two disciplines, business and accountancy considering the difficulties enumerated earlier in chapter 5.

The third was also a postal self-administered questionnaire aimed at students of the School of Business and Industrial Studies (SBIS). A total of 182 completed questionnaires, out of 234 were returned. This represented a response rate of 78%. The first mail response was 122 or 52% of the total.

The fourth survey was an unstructured personal interview conducted among actual and potential small business supporting organisations. These were government representatives (Ministry of Commerce, Bank of Zambia Guarantee Scheme Department), small business government and private agencies (SIDO and SEP), Commercial banks and District councils. The potential and actual small business supporting organisations selected for interview were 12 key institutions. Due to time constraints and unavailability of the executives, as interviews had to be postponed several times, a total of 17 organisations (81% of the respondents were eventually interviewed).

8.1.2 INTRODUCTION TO URBAN POPULATION CONCENTRATION: EMIGRATION AND IMMIGRATION PATTERNS

There were two areas of interest in studying urban population concentration. The first was to look at the tendencies of people to emigrate from rural to urban areas. The second was to learn about tendencies to permanently stay in town - immigration patterns. Findings from such an analysis were expected to help in judging whether urban concentration can be expected to increase or decline. The outcome was seen to be useful in two ways. First, the results would help in understanding the likely effects on the job market situation in Zambian urban areas. Second, it would disclose the degree of response to the president's call of going back to the land (rural areas) in order to reduce the urban unemployment pressures instead of permanently staying in urban areas.

Results of emigration and immigration patterns indicated that a very large proportion of about 9 out of 10 students' and graduates' parents were born in rural areas. Further a good proportion of 2 out of 5 people had stayed most of the time in urban areas. The majority of 8 out of 10 people "now" staying on the copperbelt and Lusaka were immigrants from rural areas (see appendix 8A1.2.2.1 for detailed analysis).

This tendency of staying in urban areas by students' and graduates' parents was equally applicable to their own children. The concentration was expected to be worse since about 1 out of 2 of these offsprings were actually born in urban areas in large families. The average size of a family, for example, was about 5 children in the case of students. The greatest majority of at least 8 out of 10 were now living in urban areas.

This trend was expected to continue since students and graduates, and their own off offsprings would probably remain there for a very long time, thus intensifying the urban population explosion. This view was based upon the findings that about 7 out of 10 of those parents who were born in villages but had stayed most of their time (about 20 years on the average), in urban areas were still living in town. For detailed analysis, refer to and 6A1.2.2.2.

These findings of continued concentration of the older and the younger population in the two urban provinces have serious social and economic implications. This situation would exarcerbate the already critical demand for more social services. It will also constrain the job market in the urban areas. This would in turn put more pressure on the Zambian government to create more jobs. This burden can only be alleviated by expanding the economy through creation of more businesses by potential and existing businessmen to absorb the ever increasing labour supply.

Several questions were raised in the background (chapters 2 and 3). The first was who will form more businesses to create more jobs? This question is partially answered in this chapter (which looks at one group of potential businessmen (SBIS graduates) and the next chapter which analyses practising businessmen.

The second issue that was put forward was whether potential businessmen (SBIS graduates) were positively predisposed to forming such businesses. Chapter 6 considers attitudes of these potential businessmen towards forming their own businesses. In

this regard it analyses students and graduates general attitudes for working in large and small businesses by establishing factors that may influence them to do so or dissuade them. This discussion is intermarried with students' working prospects and graduates' working experiences. Finally their attitudes towards forming businesses are discussed.

The third concern that was brought up was whether other groups such as practising businessmen could be relied upon to partially break this impasse. Chapter 7, focuses on the process of enterprise formation and becoming an entrepreneur among practising businessmen. The findings are related to students' and graduates' results. It also examines business formation rates, types of business firms created and types of ownership. Empirical investigation of small size (definition of a small firm) is formally done before evaluating the role of small businesses in employment creation to absorb the ever increasing population in urban areas. The differences in job creation between small and large firms are examined.

The fourth point that was advanced was what was government's policy and whether it was conducive to encouraging small business creation. Chapters 8 to 10 turn attention to small business policies and support facilities available to encourage business formation in Zambia. Chapter 8 is devoted to empirical findings on students' and graduates views on the appropriateness of SBIS degree programmes in equipping students with skills for business start-ups, working in small compared to large firms and suitability of the degree programmes in general.

In Chapter 9 attention is then turned to research results on governments' non fiscal small business stimulatory policies. This includes views of respondents on their support for a policy of assisting small businesses and the effects of leadership code on small business formation.

The fifth argument that was put forward was what steps government and non government agencies and the financial community were taking in solving the problem. Chapter 10 appraises the actual roles of government (fiscal policy) and small business supporting agencies (SIDO, SEP, financial institutions and local authorities) in small business development and financing. Finally, discussions and recommendations are presented in chapter 11.

8.1.3 INTRODUCTION TO FINDINGS ON POTENTIAL BUSINESSMEN (SAYS)

One of the roles of small scale businesses in Zambia, discussed as the third point in chapter 4.4 was that they serve as a breeding ground for technical and managerial skills by helping in mobilising untapped resources of capital and skill which may otherwise remain un-utilised. An extension of this argument was to view small scale businesses as a training ground for starting own businesses. One of the aims in examining respondents' attitudes towards working in small businesses was to find out the extent to which this sector was fulfilling its expected role of acting as "training ground" for business start ups.

The third main hypothesis of this study, it will be recalled from chapter 2, was:

> That students and graduates from Copperbelt University's School of Business and Industrial studies, SBIS (potential small businessmen) have negative attitudes towards self-employment or wage paid employment in the small manufacturing sector. They prefer executive positions in large firms.

The related objective was:

> To find out attitudes of SBIS students and graduates (potential entrepreneurs) towards selection into self-employment or salaried employment in the small manufacturing sector as career alternatives:
>
> a) while at the University;
>
> b) after leaving the University.

Studying respondents' attitudes towards businesses necessarily called for comparing these attitudes to their attitudes towards working in large firms. Another related aspect that was examined was students' working prospects and graduates' working experiences in small organisations compared to large organisations (section 6.2). Further, their parental working practices were also analysed for any any relationships. Finally, students and graduates attitudes towards selecting business ownership for their career upon graduation were examined. In section 6.3, graduates' preparations for starting business at the time of this study were examined to discover if there were any changes in their patterns of predisposition to business formation from the time of graduation. Their predisposition to business ownership was thought to be useful in understanding their views on the inadequacy of SBIS degree in starting business.

The third main hypothesis was therefore broken down into two to make it easier to test it. Thus the null and alternative hypotheses were:

Hypothesis 1

H_0: There is no difference in students' or graduates' attitudes in selecting salaried employment between small and large firms.

H_1: There is a difference and in particular most students and graduates seek employment in large firms as opposed to small firms.

Hypothesis 2

H_0: There is no difference in students' or graduates' attitudes towards starting their own businesses.

H_1: Students and graduates have negative attitudes towards starting their own businesses.

These main hypotheses and objectives in turn necessitated examination of:

1) students and graduates' general attitudes towards working in small or large firms. This required looking at the factors that may or may not influence them to work in large or small firms;

2) students' attitudes and career expectations and graduates' attitudes and career experiences of working in small or large firms;

3) students' and graduates' attitudes towards selecting business ownership for their careers;

4) whether parental background and characteristics can influence their attitudes towards career selections. The characteristics included the level of education, type of occupation, type of organisation, business ownership and types of such businesses;

6.2 WORKING IN LARGE OR SMALL ORGANISATIONS

Students' and graduates' attitudes towards working in large firms were studied in two parts. First, they were asked to indicate, on a five point scale, factors that would influence them to or dissuade them from working in large businesses. Second, students working prospects and graduates working experiences were examined.

6.2.1 GENERAL ATTITUDES TOWARDS WORKING IN LARGE ORGANISATIONS

Findings on influencing factors to work in a large firm excluded graduates' responses. These were technically left out due to a typographical oversight of not typing a heading. It was feared the responses under that section could be erroneous if included. This action should however not result in significant differences between the two groups as findings on working in small firms where data for both was available will soon show that the responses were almost the same.

One main analysis technique, factor analysis, was used in identifying factors that may influence students to work in large organisations. But frequencies were also utilized. The former was used to identify a few groups of related items that belonged together forming a factor. Chi-square was avoided for testing variables since they were too many. But frequencies were instead found useful to indicate the degree of endorsement of each of the variables instead of grouping them together as was the case with factor analysis. Theoretical aspects of factor analysis and the six step procedure that was adopted in this study are fully

described in chapter 5 appendix 5A3. The practical aspects of factor analysis as it related to this study, tests used, extraction of factors and naming them are under taken in this chapter.

6.2.1.1 FREQUENCIES OF VARIABLES THAT MAY INFLUENCE OR DISCOURAGE STUDENTS TO WORKING IN LARGE ORGANISATIONS

When frequencies were done, the results were generally not positive. Five variables out of eight were outstandingly seen as determinants for working in large firms. The first was resource availability viewed by 86% of them as an important consideration. The second was high status due to availability of support services (83%). The third stated by 76% of them was using the large firm as a training ground to start own firm. The fourth and fifth respectively were security in the sense of having predictable working atmosphere (65%) and high status due to high salary (58%).

As regards the remaining three variables, there were general disagreements on the extent of their influence. Being in charge of many departments was seen as a positive aspect by 43% of the students while 32% were not sure and 25% disagreed. High status due to more power in large than small firms was not clear cut either since 46% disagreed while 33% agreed and 21% were not sure. Finally, security, in the sense of not being easily sacked, was seen by 38% of the respondents as a factor while again about 38% disagreed and 24% were not sure.

Bureaucracy was however seen by about 78% of the students as a dissuading factor to work in a large business. The percentage for graduates was 67%.

On the whole it would appear that the most influencing factors to students for them to work in large firms were:

1) availability of support services (83%)
2) resource availability to implement plans (86%) and
3) training ground for start of own business firm (76%).

But bureaucracy was a dissuading factor (76%).

8.2.1.2 APPLICATION OF THE FACTOR ANALYSIS MODEL

As stated in chapter 5 appendix 5A3, in factor analysis, the basic tool for analysis, or the starting point, is the computation of correlation matrix based on a variance and covariance matrix which is built for the variables of interest. It will be recalled that the six step procedure of factor analysis adopted in this study involved first, the computation of variances and covariances of a matrix. Second, finding a correlation matrix for each of the variables. Third, calculating eigenvalues and the corresponding eigenvectors. Fourth, extracting a number of factors necessary to represent the data by discarding any components that account for a small proportion of the variation in the data. Fifth, rotating the extracted factors using varimax. Sixth, naming the final factors by the most meaningful terms.

6.2.1.2.1 Computing The Correlation Matrix and Testing The appropriateness of the Factor Model

Application of the first step resulted in a correlation matrix shown in table 6.1 for eight variables which could influence a student to work in a large firm. The table shows correlation between one variable and another. The diagonal elements are obviously equal to 1 since they relate to the same variable and the correlation must be 1.

The appropriateness of the factor model was formally tested using three techniques. But visual examination of table 6.1 also showed that the variables shared common factors. Since correlations were not very low. For example the correlation between high salary and availability of support services was 0.3. Likewise being in charge of many departments and more power had a correlation of nearly 0.5 (for detailed explanation of types of factors, refer to chapter 5 appendix 5A3.3.1.3)

The first formal test was Bartlett's test of sphericity. It requires rejection of an hypothesis that the population correlation matrix is an identity matrix for the model to be appropriate. It proved successful as table 6.1 shows (see bottom of the table). The test statistic for sphericity was large at 165, with a very small significance level of 0.0000, as required in order to reject the hypothesis. For a full discussion of testing the appropriateness of the factor model,
refer to chapter 5 appendix 5A3.4.3.2.2.

Table 6.1 Correlation Matrix of Influencing Factors For Students to work in Large Firms

	STATUS-HIGH SALARY	STATUS SUPPORT SERVICES	STATUS MANY DEPTS	STATUS DUE TO POWER	RESOURCE AVAILABILITY	TRAINING GROUND TO START BUS	JOB SECURITY	PREDICTABLE ATMOSPHERE
HIGH STATUS DUE TO HIGH SALARY	1							
STATUS DUE TO SUPPORT SERVICES	.32	1						
STATUS FOR HAVING MANY DEPARTMENTS	.30	.12	1					
STATUS DUE TO MORE POWER	.29	.06	.46	1				
RESOURCE AVAILABILITY	.01	.22	.18	.16	1			
TRAINING GROUND TO START BUSINESS	.01	.08	.24	.19	.32	1		
JOB SECURITY	.17	.16	.09	.13	.09	-.01	1	
PREDICTABLE ATMOSPHERE	.03	.22	.13	.16	.25	.18	.25	1

KAISER-MEYER-OLKIN MEASURE OF SAMPLING ADEQUACY = .63
BARTLETT TEST OF SPHERICITY = 168 SIGNIFICANCE = .00000
THERE ARE 22 (39.3%) OFF-DIAGONAL ELEMENTS OF AIC MATRIX > 0.09

Key: Influencing factors for students to work in large firms

1. Status - high salary: high status due to high salary
2. Status - support services: high status due to availability of support services
3. Status - many departments: high status due to being in charge of many departments
4. Status - power: high status due to having more power than in small firms
5. Resources availability: resource availability in large firms
6. Training to start bus: using a large firm as a training ground for starting own firm
7. Job security: job security since I cannot easily be sacked
8. Predictable atmosphere: security since there is predictable atmosphere

The second formal test of the suitability of the factor model was Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy. It is an overall measure of all the variables taken together. The nearer to 1 the test is, the more appropriate the case of the factor model is. Smaller values of KMO measure indicate that the model should not be used. The KMO test statistic for influencing variables to work in large organisations was 0.6, indicating that

the model could be used (see table 6.1 at the bottom). Norusis (1985: 129) classifies measures in the 0.90's as marvellous, in the 0.80's as meritorious, in the 0.70's as middling, in the 0.60's as mediocre, in the 0.50's as miserable and below 0.5 as unacceptable. Calculation of measure of sampling adequacy (MSA) for individual variables also revealed that all of them were above 0.5 as shown in table 6.2(b). These are printed on the diagonals of the anti-image correlation matrix.

The third formal test for the applicability of the factor analysis model was finding the strength of the relationship among variables, using anti-image correlations. Most of the coefficients were low, many of them negative (see table 6.2(b)). The anti-image correlation is the negative of the partial correlation coefficient. It measures the strength of the relationship among variables. The test is based upon the statistical concept that if the variables share common factors, then the partial correlation coefficients between pairs of variables should be small when linear effects of the other variables are eliminated. Since there were not "too many big coefficients" in the matrix of anti-image correlations, this showed that the data was suitable for adopting the factor analysis model.

Table 6.2(a) Anti-Image Covariance Matrix of Influencing Factors For Students to Work in Large Firms

	STATUS-HIGH SALARY	STATUS SUPPORT SERVICES	STATUS MANY DEPTS	STATUS DUE TO POWER	RESOURCE AVAILABILITY	TRAINING GROUND TO START BUSINESS	JOB SECURITY	PREDICTABLE ATMOSPHERE
HIGH STATUS DUE TO HIGH SALARY	.80							
STATUS DUE TO SUPPORT SERVICES	-.26	.81						
STATUS FOR HAVING MANY DEPARTMENTS	-.09	-.04	.75					
STATUS DUE TO MORE POWER	-.19	.09	-.29	.71				
RESOURCE AVAILABILITY	.07	-.15	-.09	-.05	.82			
TRAINING GROUND TO START BUSINESS	.03	-.00	-.12	-.06	-.21	.84		
JOB SECURITY	-.09	-.08	-.01	-.06	-.05	.07	.90	
PREDICTABLE ATMOSPHERE	.07	-.14	-.01	-.07	-.12	-.09	-.19	.84

Table 6.2(b) Anti-Image Correlation Matrix of Influencing Factors for Students to Work in Large Firms

	STATUS-HIGH SALARY	STATUS SUPPORT SERVICES	STATUS MANY DEPTS	STATUS DUE TO POWER	RESOURCE AVAILABILITY	TRAINING GROUND TO START BUSINESS	JOB SECURITY	PREDICTABLE ATMOSPHERE
HIGH STATUS DUE TO HIGH SALARY	.36							
STATUS DUE TO SUPPORT SERVICES	-.32	.37						
STATUS FOR HAVING MANY DEPARTMENTS	-.06	-.08	.67					
STATUS DUE TO MORE POWER	-.23	.12	-.39	.62				
RESOURCE AVAILABILITY	.09	-.18	-.06	-.06	.67			
TRAINING GROUND TO START BUSINESS	.04	-.00	-.15	-.08	-.25	.68		
JOB SECURITY	-.11	-.06	-.01	-.07	-.05	.09	.66	
PREDICTABLE ATMOSPHERE	.09	-.17	-.01	-.09	-.15	-.10	-.22	.67

MEASURES OF SAMPLING ADEQUACY (MSA) ARE PRINTED ON THE DIAGONAL.

6.2.1.2.2 Computing Eigenvalues & Eigenvectors

The third of the six step factor analysis procedure was finding eigenvalues. Refer to chapter 5A3.3.2.3 for a full discussion of the procedure and formulas for the computations. Recall that variances of the principal components were the eigenvalues of a matrix. Thus components resulted in eigenvalues of each of the components as is shown in table 6.3. The relevant part of the table starts from the FACTOR column up to CUM PCT. The first part dealing with communality should be ignored for the

time being. Note that the number of eigenvalues is equal to the number of variables or components i.e. 8 as shown in the first column. The table also shows that the eigenvalues are ordered in decreasing eigenvalues. Thus the first eigenvalue of 2.2 in table 6.3 column 2 referred to first component i.e. high status due to high salary. This accounted for about 28% (column 3) of variances out of all the eight variables. The second eigenvalue of 1.2 was associated with the second component i.e. high status due to availability of support services. This accounted for about 16% of all the variances.

Table 6.3 Communalities & Eigenvalues for Initial Statistics of Influencing Factors for Students to work in Large Firms.

INITIAL STATISTICS:

EXTRACTION USING PRINCIPAL-COMPONENTS ANALYSIS (PC)

VARIABLE	COMMUN-ALITY	* * *	FACTOR	EIGEN-VALUE	% OF VAR	% CUM
		*				
HIGH STATUS DUE TO HIGH SALARY	1	*	1	2.21	28	28
STATUS DUE TO SUPPORT SERVICES	1	*	2	1.25	16	43
STATUS FOR HAVING MANY DEPARTMENTS	1	*	3	1.19	15	58
STATUS DUE TO MORE POWER	1	*	4	.95	12	70
RESOURCE AVAILABILITY	1	*	5	.68	9	78
TRAINING GROUND TO START BUSINESS	1	*	6	.66	8	87
JOB SECURITY	1	*	7	.60	7	94
PREDICTABLE ATMOSPHERE	1	*	8	.47	6	100

The rest of the table is explained in the same manner. Note however that an important property of the eigenvalues is that they add up to the sum of the diagonal elements, i.e. 8. This is the trace of the correlation matrix of table 6.1. In short the sum of the eigenvalues was equal to the number of the variables,

which was 8 in this analysis. Note also that the sum of the variances of the principal components was equal to the sum of the variances of the original variables. In other words, the 8 principal components accounted for all the variation in the original data as is clearly shown in table 6.3 since the cumulative percentage was 100%.

6.2.1.2.3 Factor extraction

The fourth step in factor analysis required using the eigenvalues or indices calculated in step 3 above to extract a number of factors necessary to represent the data by discarding any components that only accounted for a small proportion of the variation in the data.

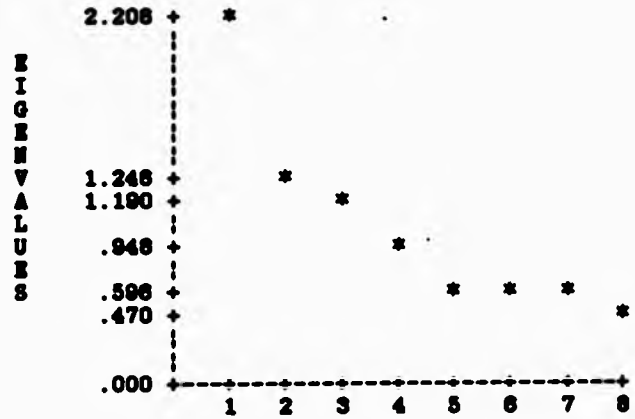
6.2.1.2.3.1 Selecting the most Important Factors

The principal components with large indices, in table 6.3 were selected using principal components analysis. Refer to chapter 5A3.3.2.4 for a description of the methodology of factor extraction. The components are arranged in a decreasing order with the first component accounting for the largest amount of variance in the sample as was described in the previous section.

As an aid in making the decision, the percentage of the total variance of all the variables that was explained by each factor was considered. For example, the first component accounted for about 28% of variables in table 6.3 and so on. The larger the cumulative percentage attributable to a few factors, the fewer the number of factors that were needed to explain the data. One of the aims was "to find the least possible number of

components to account for the generally large number of test variables" (Ehrenberg, 1981:228). The rule of thumb used to find a provisional solution of the number of un-rotated factors was to accept only factors that accounted for variances greater than unity for the correlation matrix. The number of provisional factors which satisfied this requirement was found to be 3 as can easily be seen from table 6.3. That is, the first three were selected as provisional factors. A scree plot, as figure 6.1 shows also confirmed that the provisional factors were 3. It shows the total variance associated with each factor, revealing a distinct break between the steep slope of the large factors and the gradual trailing off of the rest of the factors as the figure clearly shows.

Figure 6.1 Scree plot of eight eigenvalues for students to work in large firms



PC EXTRACTED 3 FACTORS.

6.2.1.2.3.2 **Communality of A variable**

When extracting factors it is important to note the distinction between the communality and uniqueness of a variable.

As explained in appendix 5A3.3.2.4.4, after the 3 factors were selected, they took a reduced form of the generalised model given in equation 5A3.1. The model then contained the coefficients which were used to express a standardized variable in terms of the factors as is shown in table 6.4 in a matrix of factor loadings called the factor pattern matrix. The table indicates that the factors with large coefficients (factors loadings), in absolute value, for a variable were closely related to the variable. For example, the factor pattern matrix in table 6.4 showed that the first variable in the table, high status due to having more power, was closely related to factor 1 since the factor loading was 0.64. The second variable, high status due to being in charge of many departments, with a coefficient of 0.63 was also related to the first factor, These two variables were however negatively related to the third factor. The factor loadings were -0.51 and -0.50. Thus it is clear that the first two factor loadings and the third on the first factor are correlated with the third factor (see table 6.4). The rest of the table is explained in a similar manner.

When the estimated factor loadings are uncorrelated with each other (orthogonal), the factor loadings are also said to be the correlations between the factors and the variables (Norusis, 1988:133). This matrix is referred to as the factor structure matrix, which is the same as the factor pattern matrix when

factors are orthogonal. Achieving uncorrelated factor loadings so that a set of them are correlated only with one factor (not two or more) is the whole purpose of factor analysis as explained in appendix 5A3 and as will soon be illustrated when factor rotation is discussed. But in the mean-time a different interpretation of factor loadings will now be given.

Table 6.4 Factor matrix - extraction of variables before rotation for influencing factors for students to work in large firms

FACTOR MATRIX:
INITIAL EXTRACTION USING PRINCIPAL-COMPONENTS ANALYSIS (PC)

	FACTOR 1	FACTOR 2	FACTOR 3
STATUS DUE TO MORE POWER	.64	.10	-.51
STATUS FOR HAVING MANY DEPARTMENTS	.63	-.04	-.50
RESOURCE AVAILABILITY	.54	-.47	.26
PREDICTABLE ATMOSPHERE	.52	-.16	.49
STUTUS DUE TO SUPPORT SERVICES	.49	.30	.43
JOB SECURITY	.40	.35	.39
HIGH STATUS DUE TO HIGH SALARY	.46	.65	-.15
TRAINING GROUND TO START BUSINESS	.46	-.59	-.11

A different way of explaining the factor loadings in table 6.4 was to view them as the standardized regression coefficients in a multiple regression equation. Each of the original 8 variables was regarded as the dependent variable while the three factors were the independent variables. Then the argument was that if the factors were uncorrelated, the values of the coefficients were not dependent on each other. They therefore represented the *unique contribution* of each factor, and were the *correlations between the factors and the variable*. This situation is referred to as the uniqueness of a variable and the *communality* of a variable.

It is easier to explain these two terms by referring to the previous section and table 6.3. Recall that the selected set of the 3 factors comprised the most important factors since they accounted for the largest percentage of 58% of the total variance in the variables. This therefore meant that the variables whose variance was explained by the same factors were highly correlated. If this was the case, then the variables must have had some shared common elements with the factors. The sharing of *common* factors is referred to as the *communality* of the variable.

When all the factors (principal components) are included in a solution, all of the variance of each variable is accounted for, and there is no need for a unique factor in the model. This was the case before factors were extracted. Refer now to table 6.3, the first part, the column labelled communality, which has been ignored until now. Note that the proportion of variance accounted for by the common factors was 1 (100%) for each of the variables from the total variance of all the variables. The total variance was equal to the number of variables i.e. 8. But the most important point to remember in this chapter is that nothing could have been gained from such a situation since there could have been as many factors as the initial variables. It will be recalled that the sole purpose of choosing factor analysis technique was to reduce the number of factors to a few that could explain the data.

Hence, when a few factors were selected to describe the original variables, a proportion of the variance that was not explained by the communality of a variable remained. The range explained by common factors can be from 0 to 1, with 0

indicating that the common factors explain none of the variance, and 1 revealing that all the variance is explained by the common factors. The variance that was not explained by the common factors was attributed to the unique factor. This is what was referred to above as the uniqueness of the variable. Table 6.5 which shows the final statistics for example revealed that after selecting the 3 factors, on the second part of the table, the proportion that was explained by the communality of the first variable (high status due to high salary) was nearly 0.7 (see the column labelled communality). This meant about 0.3 was attributed to the uniqueness of the variable. In the case of the second variable, high status due to support services, about 0.5 of the variation or differences in responses was due to sharing of common factors while the remaining 0.5 was due to the unique contribution of the variable. On the second part of the table (which is not a continuation of the first part), it can be seen that the first factor explained most of the variations or differences in responses since it accounted for about 28% of variances.

Table 6.5 Final statistics of specificity & Communality of a variable showing Eigenvalues for students

FINAL STATISTICS:

VARIABLE	COMMUN-ALITY	* * *	FACTOR	EIGEN-VALUE	% OF VAR	% CUM
HIGH STATUS DUE TO HIGH SALARY	.65	*	1	2.21	28	28
STATUS DUE TO SUPPORT SERVICES	.52	*	2	1.25	16	43
STATUS FOR HAVING MANY DEPARTMENTS	.65	*	3	1.2	15	58
STATUS DUE TO MORE POWER	.68	*				
RESOURCE AVAILABILITY	.58	*				
TRAINING GROUND TO START BUSINESS	.59	*				
JOB SECURITY	.44	*				
PREDICTABLE ATMOSPHERE	.54	*				

The communality, which is a proportion of variance of each variable explained by the selected three common factors helped to explain how well the three factor model described the original variable. Since the factors were assumed to be uncorrelated, the total proportion of variance explaining the communality, was found by summing up the variance proportions explained by each factor.

Consider, for example, the high salary index in table 8.4. Factor 1 accounted for 21.17% of the variance for this variable. This was a result of squaring the correlation coefficient for Factor 1 and high salary (.46). In a similar manner the contribution of Factor 2 was obtained as $(.65)^2 = 42.25$. Finally the third Factor's share was 02.25% (-0.15^2). Thus the total percentage of variance in the high salary accounted for by the three factor model in table 8.4 was 65.67% (.21.17 + 42.25 + 2.25) or nearly 0.7 as computed in table 8.5 under the communality column.

8.2.1.2.3.3 Final Testing of How Good the Model fitted the Data

After selecting the factors, but before rotating them, a test of the magnitude of the residuals was done to determine how well the fitted model reproduced the observed correlations. Residuals are simply differences between observed correlations and estimated correlations. They are interpreted just like any other differences between observed and estimated values such as chi-square. The greater the differences in absolute value and the larger their proportion to total differences between pairs of variables, the greater the chances that they were dissimilar and the more likely that the model did not fit the data. Refer to chapter 5A3.3.2.4.5 for formulae.

In table 6.6, the lower left triangle contains the reproduced correlation matrix. The diagonal statistics with asterisks (*) represent the same communalities of variables just presented above in table 6.6. It can be seen for example, that the first figure of 0.65 in the first row first column of table 6.6 (with a star) is the communality of the variable - high status due to high salary presented above. The upper right triangle, encloses residuals between the observed correlations and the reproduced. The percentage of residuals which were greater than 0.05 in absolute value was calculated. These were 19 representing 67% of all the residuals. This showed that the model did not quite fit the data since over 50% of the residuals were greater than 0.05.

The residuals in table 6.6 between observed and estimated, were obtained by finding differences between observed values between pairs of variables of the correlation matrix in table 6.1 and the estimated correlation coefficient for the same pair of variables using equation 5A3.31 which was:

Equation 5A3.31 Estimated correlation coefficient between two variables

$$r_{ij} = \sum_{j=1}^{k} r_{fi}\, r_{fj} = r_{1i}\, r_{ij} + r_{2i}\, r_{2j} + \ldots . r_{ki}\, r_{kj}$$

where

k = the number of common factors

r_{fi} = correlation between the fth factor and the ith variable

Using information from table 6.4 and applying equation 5A3.31 to find the estimated correlation coefficient for high salary and support services, based on the three factor model, results in:

$$r_{7,5} = (0.46)(0.49) + (0.65)(0.30)\ (-0.15)(0.43)$$

$$= 0.2254 + 0.195 - 0.0645$$

$$= 0.3559$$

Table 6.1 showed that the observed correlation coefficient between high salary and support services was 0.32. So the difference between observed correlation coefficient and estimated from the model was about 0.32 - 0.36 = - 0.04. This is called the residual. It was the same result shown earlier in table 6.6 between variables high salary and support services, as the first entry on the top right triangle. The rest can be calculated in a similar manner.

Table 6.6 Reproduced Correlation Matrix (showing communalities and residuals) for students

REPRODUCED CORRELATION MATRIX:

	STATUS-HIGH SALARY	STATUS SUPPORT SERVICES	STATUS MANY DEPTS	STATUS DUE TO POWER	RESOURCE AVAILAB-ILITY	TRAINING GROUND TO START BUS	JOB SEC-URITY	PREDICT-ABLE ATMOSPHERE
HIGH STATUS DUE TO HIGH SALARY	.636	-.04	-.14	-.14	.11	.15	-.19	-.05
STATUS DUE TO SUPPORT SERVICES	.33	.328	.04	-.06	-.02	.07	-.31	-.20
STATUS FOR HAVING MANY DEPARTMENTS	.34	.08	.636	-.19	-.05	-.14	.09	.04
STATUS DUE TO HAVE POWER	.43	.12	.43	.688	-.01	-.11	.06	.09
RESOURCE AVAILABILITY	-.10	.24	.23	.16	.308	-.19	-.09	-.23
TRAINING GROUND TO START BUSINESS	-.14	.01	.38	.30	.31	.998	.09	-.11
JOB SECURITY	.36	.47	.04	.09	.15	-.06	.648	-.08
PREDICTABLE ATMOSPHERE	.06	.42	.09	.07	.08	.29	.34	.548

THE LOWER LEFT TRIANGLE CONTAINS THE REPRODUCED CORRELATION MATRIX; THE DIAGONAL, COMMUNALITIES; AND THE UPPER RIGHT TRIANGLE, RESIDUALS BETWEEN THE OBSERVED CORRELATIONS AND THE REPRODUCED CORRELATIONS.

THERE ARE 19 (67.0%) RESIDUALS (ABOVE DIAGONAL) THAT ARE > 0.05

6.2.1.2.4 Rotating Factors

The fifth step in factor analysis, after extracting the three factors was factor rotation. The need for factor rotation arose because of high correlation of each of the variables with at least two of the three provisional factors in table 6.4. Consider, for example, the first two variables, power and in

charge of many departments, in table 6.4. It will be noticed that they were highly correlated with Factor 1 since the factor loadings were 0.64 and 0.69 respectively. But the same variables were also negatively highly correlated with Factor 3 since factor loadings were -0.51 and -0.50. These relationships were also true for the fourth and fifth variables. But the third variable (resources) and the last two (high salary and training) were highly correlated with Factor 1 and Factor 2. The sixth variable job security was however correlated with all the three Factors.

This high correlation between each of the variables and each of the factors indicated that a great percentage of the variance in the variable was explained by the common factors and a small percentage by the specific factors. This situation of high correlation of a variable with two or all the three factors was however an undesirable situation since it became difficult to explain the most important factor that related to a variable. This meant for example that Factors 1 and 3 were important to four variables. But Factor 1 and 2 were important to two while all factors were important to one variable.

Likewise, high correlation of a factor with many variables prohibited identification and explanation of the most important variables that were related to a particular factor. Look, for example, at Factor 1 table 6.4. It will be noticed that it correlated with almost all the eight variables since the correlation was at least 0.5 for 7 variables but it was 0.4 for the sixth variable (job security). High correlation of almost all the variables to a factor was no better than the initial a analysis stage. The variables and factors did not therefore

appear correlated in any interpretable pattern. The sole purpose of selecting factor analysis, it has been emphasised already, was to identify factors that were substantively meaningful in the sense that they summarized sets of highly related homogeneous groups of variables which were unrelated to other groups of variables.

The purpose of factor rotation was therefore to transform the matrix of the three provisional factors in table 6.4 into a matrix of new factors that were easier to interpret. This basically meant breaking up each of the original common factors among variables by "rotating" in order to obtain a simpler structure that was most meaningful. This required to have high loadings for each of the factors relating to a homogeneous highly related group of variables and low loadings for each of the other groups of variables forming separate factors so that each factor could be differentiated and named. In other words, the whole point was an attempt for each factor to have near zero loadings for a large number of variables on one hand and for each variable to have zero loadings on all other factors except preferably one on the other hand. The aim was to avoid the existing situation where high loadings on all variables was present as was the case with Factor 1 and prevalence of high loadings on two or three factors.

The selected method of factor rotation was orthogonal based on varimax which is the most commonly used. Refer to appendix 5A3.3.2.5.3 for justification for selecting these methods. For visualisation for the practical differences between unrotated and rotated factors respectively, in the space, see figures 6A2.2 and

6A2.3. They show the plotting of variables using factor loadings as co-ordinates for factors 1 and 2. The most important message to carry from the rotated plot is that if rotation has achieved a simple structure, then clusters of variables should occur near the ends of an axis and at their intersection. First variables at the end of an axis are those that have high loadings only on that factor. Consider, for example, the variables labelled 3 and 4 (power and in charge of many departments) on the horizontal axis on the far right hand side on table 6A2.3 for rotated factors. They have high loadings on the horizontal factor i.e. Factor 1. Variable 7 and 2 (job security and support services) have high loadings on the vertical factor i.e. Factor 2. Second, variables that are near the origin of the plot have small loadings on both factors (see variable labelled 5 i.e. (resources). Third, variables that are not near the axis are explained by both factors (see variable labelled 1 i.e. (high salary).

6.2.1.2.5 Interpretation and naming of factors

The new factors and the related variables which had high loadings on them as exhibited by the rotated plot were conveniently sorted into a factor pattern matrix so that variables with high loadings on the same factor appeared together. This is shown in table 6.7. In interpreting the factors, factor loadings below 0.5 should be ignored.

The three most important factors that would influence students to work in large business organisations, therefore appeared to be responsibility with high pay, support services with job security and stability (financial and human resources).

The findings revealed however, that on the whole, students did not have an overwhelming positive attitude towards factors that may influence them to work in large businesses. This was reflected in table 6.6 which showed more negative residuals in the reproduced correlation matrix. The same was reflected in table 6.2(a) which dealt with covariance matrix. The negative residuals meant that the expected were greater than the observed. The anti-image covariance and correlation matrices in table 6.2(a) and 6.2(b) for example, also showed that being in charge of many departments was not supported since it had negative correlations with all the other variables. The same picture was obtained when frequencies were done as shown earlier.

Table 6.7 Final Extraction of rotated Factors that may influence students to work in large firms.

VARIMAX ROTATION FOR FACTOR EXTRACTION USING KAISER NORMALISATION

ROTATED FACTOR MATRIX:

	FACTOR 1 Responsibility with high pay	FACTOR 2 Support Services with job security	FACTOR 3 Stability (Financial human resources)
STATUS DUE TO MORE POWER	.81	.08	.12
STATUS FOR HAVING MANY DEPARTMENTS	.77	.01	.23
HIGH STATUS DUE HIGH SALARY	.53	.52	-.32
STATUS DUE TO SUPPORT SERVICES	.06	.70	.13
JOB SECURITY	.04	.66	.02
RESOURCE AVAILABILITY	.07	.19	.73
TRAINING GROUND TO START BUSINESS	.29	-.14	.70
PREDICTABLE ATMOSPHERE	-.04	.50	.54

8.2.2 GENERAL ATTITUDES TOWARDS WORKING IN SMALL BUSINESSES

Results on influencing factors to work in small firms included both students' and graduates' responses. The same steps of factor analysis described in the case of large firms in section 8.2.1.2.1 to 8.2.1.2.5 were applied. But description of the same steps were not repeated when dealing with small firms or when combined overall analysis was done. Only pertinent tests and findings were discussed. Relevant tables were however shown in the appendix.

Frequencies were first carried out to have some idea of the pattern of responses. Then factor analysis was applied to the variables in an attempt to find out whether there were a few important underlying factors that could explain respondents' attitudes towards small businesses.

In order to determine attitudes of respondents towards working in small business, they were asked to indicate the level of agreement or disagreement, on a five point scale, with several factors which may influence them to or dissuade them from working in small business. In general, both students and graduates were favourable to the factors in spite of the fact that they will most probably not work in small businesses in a foreseeable future as will be discussed in section 8.2.3.

6.2.2.1 [redacted]

Out of 101 students, 84% felt that working in small business was challenging as it offered ability to take initiative. The corresponding percentage for graduates was 78%. About 60% of students and 58% of graduates agreed that it offered opportunities for taking additional jobs. About 12% of the students and 16% of graduates disagreed. The percentages for not sure were 28% for both groups. A total of 84% of the students and 78% of the graduates felt that small business was challenging as there was high involvement in decision making.

However, only 36% of the students and about 31% of the graduates felt that they would be treated like one of the owners as 36% from both groups were not sure while 26% and 31% disagreed respectively. Yet 75% of the students and 59% of the graduates stated that there was good personal relationship providing a sense of belonging to own organisation. In addition, 77% of the students and 74% of the graduates believed that there was good personal relationship making one feel that one's contribution was welcome. Still further, 79% of the students and 85% of the graduates felt that the small business could be used as a testing ground to start own business. Finally, the small business was viewed as a place to gain experience to start own business by 80% of the students and 83% of the graduates.

In spite of having favourable views, 65% and 61% respectively had fears of finding the right small organisation. Only 48% and 45% respectively agreed that there was little scope for development while 43% and 38% respectively disagreed. Both groups were however unanimous, 74% and 69%, that resource

constraints inhibiting implementation of plans was a discouraging aspect. Poor working relationship with less educated fellow workers was not seen as a constraint by both as those who disagreed were 58% and 65%. A small percentage of 18% and 11% did so. Chi-square analysis revealed that there were no significant differences in all the responses for sex, year of study and between BBA and BAc.

In addition, Chi-square analysis was done to find out whether the differences in responses above between students and graduates were statistically significant. All except two failed to pass the 5% cut off point. These two were "good personal relationship providing a sense of belonging to own organisation" and using "the small business as a testing ground to start own business". More students than graduates had agreed to the statements. The differences were significant at 0.0017 and 0.0010 respectively. These responses were therefore on the whole very similar.

In summary, it appeared that the most influencing variables for working in a small firm between students and graduates were respectively:

1) ability to take initiative (84% and 78%);
2) opportunity to take up additional jobs (60% and 56%);
3) high involvement in decision making (84% and 78%;
4) a sense of belonging to own organisation (75% and 59%);
5) feeling that one's contribution was welcome (77% and 75%);
6) testing ground to start own business (79% and 65%);
7) chance to gain industrial experience necessary to start own business (80% and 83%).

But resource constraint was seen as the drawback (65% and 61%).

6.2.2.2. APPLICATION OF THE FACTOR ANALYSIS MODEL TO INFLUENCING FACTORS FOR WORKING IN SMALL FIRMS

6.2.2.2.1 INFLUENCING FACTORS FOR STUDENTS TO WORK IN SMALL FIRMS

After getting a general impression of the responses on important influencing variables, an attempt was then made to extract a few factors from the several initial 8 factors.

The appropriateness of the factor model was formally tested using the same three techniques. Bartlett's test of sphericity was large at 222 with a very low significance level of 0.0000. This indicated that the method was acceptable. KMO measure of sampling adequacy for all the variables was 0.72, which Norusis would describe as middling but was satisfactory. The measure of sampling adequacy (MSA) for individual variables, with all variables containing above 0.7 confirmed that the data was appropriate for using factor analysis. The anti-image correlation matrix had low coefficients generally. This was an indication that relationships between variables were very strong since there were not "too many big coefficients". Refer to section 6.2.1.2.1 above for detailed explanations of these tests. The level of endorsement of each variable reflected by the variances and eigenvalues was determination and eigenvalues were computed. Three initial factors were extracted. But they correlated among themselves. Seven of the eight variables under Factor 1 correlated highly among themselves.

The factors were then rotated using varimax approach. The reproduced correlation matrix was obtained in a similar manner as explained earlier. The final extracted three influencing factors for students to work in small firms are shown in table 6.8. One discouraging factor comprising all the four initial variables was identified.

1) Influencing Factors for students to work in small firms:

Factor 1 = Feeling of belongingness: This was a feeling of being part of an organisation.

Factor 2 = Active participation: This referred to participation in initiating decisions and action as well as benefiting from the job for personal gain.

Factor 3 = Challenging job: Performing a fulfilling job for immediate personal satisfaction and developing skills for future personal utilisation.

2) Dissuading Factor for students to work in small firms: This referred to incapacity to satisfy respondents' immediate and future needs due to instability nature of small firms and lack of growth prospects since they lack resources.

Table 6.8 Influencing Factors for students to work in small firms

VARIMAX ROTATION USING KAISER NORMALISATION.
ROTATED FACTOR MATRIX:

	FACTOR 1 Belong-ingness	FACTOR 2 Particip-ation	FACTOR 3 Challenging
TREATED LIKE OWNER	.78	.28	-.14
FEELING OF OWN ORGANISATION	.72	.26	.14
CONTRIBUTION IS WELCOME	.67	-.17	.40
INVOLVENT IN DECION MAKING	.14	.78	.06
TESTING GROUND TO START OWN FIRM	.09	.64	.10
ABILITY TO TAKE INITIATIVE	.24	.58	.47
GAIN EXPERIENCE TO START OWN FIRM	.14	.02	.80
OPPORTUNITY FOR ADDITIONAL JOBS	-.02	.31	.59

Key: For dissuading factors to work in small firms

1. Take initiative: Small business challenging due to ability to take initiative.
2. Additional jobs: Opportunities for taking additional jobs (challenging).
3. Decision making: Challenging due to high involvement in decision making.
4. Treated like owner: Good personal relationship since I would be treated like an owner.
5. Feeling of own organ: Good personal relationship since I would have a feeling of belonging to own organisation
6. Contribution welcome: Good personal relationship since I would have a feeling that my contribution is welcome
7. Test to start Firm: Use small business as a testing ground to start own business.
8. Exper.start firm: Use small business to gain experience to start own business.
9. Diff.to get SB: Difficulty of getting the right small organisation.
10. Little scope dev: Too small offering little scope for development.
11. Resource Constr: Resource constraints inhibiting implementation of plans.
12. Poor relat.w/co-workers: Poor working relationship with less educated co-workers.

6.2.2.2.2 INFLUENCING FACTORS FOR GRADUATES TO WORK IN SMALL FIRMS

The same procedure as described above was followed in the case of graduates. Bartlett's test of sphericity was large at 493 and its significance level was very low at 0.0000. These indicated that the data was very appropriate for using factor analysis. KOM measure of sampling adequate for all the variables was 0.77 (middling). The anti-correlation matrix and MSA for individual variables were quite high. The measures were about 0.8 for seven variables and 0.7 one. The anti-image correlation matrix also showed low coefficients, indicating strong relationships between variables. Eigenvalues were computed as before.

The two initially extracted factors were rotated since they were correlated with each other. Several variables within a factor were also highly correlated. The final extracted two influencing factors for working in a small firm are shown in table 6.9(a). Two discouraging factors are given in table 6.9(b). These may be described as:

1. Influencing factors for graduates to work in small business:

   Factor 1: Belongingness/participation This was a feeling of being part and parcel of the organisation and actively initiating decisions and taking action.

   Factor 2: Challenging job: This meant being kept actively occupied and acquiring skills for their own future utilisation in their own businesses.

2. Dissuading Factors for graduates to work in small business.

Factor 3: Under-development: This implied small businesses could not accommodate their personal development aspirations due to organisation structure and financial resources constraints.

Factor 4: Un-co-operative co-workers: Less educated fellow employees were seen as un-accommodating.

Table 8.9(a) Influencing Factors for graduates to work in small business

ROTATED FACTOR MATRIX:VARIMAX ROTATION USING KAISER NORMALISATION

	FACTOR 1 Belongingness	FACTOR 2 Challenging Job
TREATED LIKE OWNER	.80	-.09
FEELING OF OWN ORGANISATION	.79	.14
INVOLVEMENT IN DECISION MAKING	.84	.30
CONTRIBUTION IS WELCOME	.83	.34
ABILITY TO TAKE INITIATIVE	.55	.36
GAIN EXPERIENCE TO START OWN FIRM	.11	.80
TESTING GROUND TO START OWN FIRM	.13	.72
OPPORTUNITY FOR ADDITIONAL JOBS	.21	.66

Table 8.9(b) Dissuading Factors for Graduates to Work in Small Business

ROTATED FACTOR MATRIX:VARIMAX ROTATION USING KAISER NORMALIZATION

	FACTOR 1 Belongingness	FACTOR 2 Challenging Job
DIFFICULTY OF GETTING A SMALL FIRM	.74352	-.07696
RESOURCE CONSTRAINT FOR PLANNING	.65112	-.10780
LITTLE SCOPE FOR DEVELOPMENT	.61662	.49269
POOR RELATIONS WITH CO-WORKERS	-.15930	.90170

Table 6.10 University Respondents' Final Extracted Influencing Factors to work in Small Business

VARIMAX ROTATION FOR FACTOR EXTRACTION USING KAISER NORMALIZATION
ROTATED FACTOR MATRIX:

	FACTOR 1 Belong-ingnes	FACTOR 2 Challeng-ing	FACTOR 3 Under-devel-oped	FACTOR 4 Uncoop-erative co-workers
TREATED LIKE OWNER	.63	-.05	-.02	-.18
FEELING OF OWN ORGANISATION	.78	.18	.03	.04
CONTRIBUTION IS WELCOME	.55	.26	-.12	.39
INVOLVEMENT IN DECISION MAKING	.54	.38	-.04	.09
GAIN EXPERIENCE TO START FIRM	.05	.74	.05	.11
TESTING GROUND TO START OWN FIRM	.14	.69	-.21	-.15
OPPORTUNITY FOR ADDITIONAL JOBS	.19	.61	.20	-.03
ABILITY TO TAKE INITIATIVE	.47	.49	.07	.14
RESOURCE CONSTRAINTS FOR PLANNING	-.12	-.18	.68	-.05
DIFFICULTY OF GETTING A SMALL FIRM	-.00	.04	.65	-.08
LITTLE SCOPE DEVELOPMENT	.10	.24	.64	.21
POOR RELATIONS WITH CO-WORKERS	.01	-.05	.03	.92

6.2.2.2.3 Influencing factors for both students and graduates to work in small firms

Combined analysis of both students and graduates showed that the Factor analysis model was very appropriate for the data. KOM measure of sampling adequacy was very large at 745 with a significance level of 0.0000. There were Only about 29% off-diagonal elements of Anti image correlation matrix with more than 0.09 table 6A2.1. MSA for individual variables were very high since seven of the 12 variables had values of 0.8 (see table 6A2.2). The degree of endorsement of each variable is shown in table 6A2.4. Only 57% of residuals were greater than 0.05. The

same procedure of factor extraction was used including the use of a scree plot (fig.8A2.1). Table 8A2.5 shows the communality and specificity of a variable and the factors with large variances which explained most of the variation. The four final extracted Factors were very similar to separate analysis of students and graduates as table 8.10 reveals.

8.2.2.3 Summary on Influencing Factors for Students and Graduates to work in Small Firms

The foregoing discussion has conclusively shown that both students and graduates had positive attitudes towards factors that may influence them to work in small businesses. The main factors found to be important were two: Belongingness and active participation in mutually beneficial work. Two discouraging factors identified were incapacity of small business to satisfy their short and long term needs due to underdeveloped structure of small business.

6.2.3 [redacted] AND GRADUATES' [redacted] AND THEIR PROSPECTS OF WORKING IN SMALL BUSINESS

In order to discover whether there was any relationship between starting a small business and working in a small firm, and attitudes towards small businesses, students and graduates were asked about whether they had worked in a small business, the length of time and future plans about the same. The study also sought to find out how graduates were being utilised by employers, types of organisations graduates were working in and levels of responsibility.

6.2.3.1 [redacted] HAS WORKED IN A SMALL BUSINESS

When asked about whether the student had worked in a small business, 77% gave a negative response. There were no significant differences between BBA and BAc aspirants nor year of study nor sex. The average number of Months by the 23% who had worked in a small business was 9 months only. The minimum was 1 with a maximum of 24. Of the total, 75% had worked for about 12 months. ANOVA showed that even for the few who had worked, there was no difference between new comers to university and old timers since significance level was 0.8

Graduates were also asked the same question. Findings showed that only 15% had worked in a small firm. There was no significant differences between males and females, year of study and between BBA and BAc (see for example table GA2.7 in the appendix). Of the few who did, their average number of Months was 5 and 88% of them having worked for a period of under one year (75% of them having spent a more six months). The rest, 22%

had worked for a period of between one and two years. Differences of means between BBA and BAc did not show any significant differences. Comparing students to graduates revealed that the proportional differences were significant at 0.04 since more students had worked in small businesses (see table 6A2.7).

Table 6.11 WHETHER RESPONDENT HAS WORKED IN SMALL BUSINESS BY UNIVERSITY REPONDENT'S CATEGORY

Whether Respondent has worked in a small business	University Respondent's Category		
	Student	Graduate	
	No. Row % Col. %	No. Row % Col. %	Total No. Col. %
No	137 40.8 77.0	199 59.2 85.4	336 81.8
Yes	41 54.7 23.0	34 45.3 14.6	75 18.2
Column Total No.	178	233	411
Column Total %	43.3	56.7	100.0

X^2 = 4 P = 0.0388 Phi = 0.11 No. Missing = 24

Key used throughout the chapters:

X^2	= Chi-square
P	= Probability or Significance level
Phi	= Phi statistic value
Cramers V	= Cramers V statistic value
No. Missing	= No. of missing respondents

6.2.3.2 MAIN TIME RESPONDENTS PLANNED TO WORK IN A SMALL BUSINESS

Although respondents appeared to have favourable views to the factors that may influence them to work in small firms, it appeared that practically they had no serious intentions of doing so (table 6.11). Therefore the hypothesis that students and graduates had negative attitudes towards working in small firms appeared to be supported by research results. Among students, a

small proportion of 23% would like to work in a small business within 5 years while 65% would do so sometime in future and the rest did not know or did not state. There were no statistical differences on year of study, sex or type of degree. See for example table 6A2.6.

An even smaller proportion of 17% of graduates planned to do so. About 83% showed a negative attitude. There were no statistically large differences on type of degree, and year of graduation. But differences existed between males and females. More males (46% versus 22%) would not at all work in small firms (see table 6.12). Analysis of both students and graduates revealed that differences between the two groups were statistically significant at 0.0000 (see table 6.13).

Table 6.12 MAIN TIME GRADUATE WILL WORK IN SMALL BUSINESS BY SEX

Main Time Graduate Will Work in Small Business	Graduate's Sex		
	Male No. Row % Col. %	Female No. Row % Col. %	Total No. Col. %
Within Five Years	28 90.3 18.5	3 9.7 10.7	31 17.3
Sometime in Future	90 88.2 59.6	12 11.8 42.9	102 57.0
Not at All	33 71.7 21.9	13 28.3 46.4	46 25.7
Column Total No. Column Total %	151 84.4	28 15.6	179 100.0

X^2 = 8 P = 0.0230 Cramer's V = 0.21 No. Missing = 75

Table 8.13 MAIN TIME RESPONDENT WILL WORK IN SMALL BUSINESS BY UNIVERSITY RESPONDENT'S CATEGORY

Time Respondent Will Work in a Small business	University Respondent's Category		
	STUDENT No. Row % Col. %	GRADUATE No. Row % Col. %	Total No. Row. %
IMMEDIATELY	23 100.0 15.5		23 7.0
TWO TO FIVE YEARS	18 36.7 12.2	31 63.3 17.3	49 15.0
SOMETIME IN FUTURE	76 42.7 51.4	102 57.3 57.0	178 54.4
NOT AT ALL	31 40.3 20.9	46 59.7 25.7	77 23.5
Column Total No. Column Total %	148 45.3	179 54.7	327 100.0

X^2 = 31 P = 0.0000 Cramer's V = 0.3 No. Missing = 108

When asked for a reason for such a timing, the main reason given by 58% and 54% of the students and graduates respectively was that a large organisation was greener. It provided industrial experience (30% and 30%), job security (12% and 13%) or better prospects (8% and 6%) (see tables 8A2.9 and 8A2.10). An additional reason given by about 70% of students and 11% of the graduates was that they would like to establish their own businesses when they leave large organisations instead of working in small ones. Combined results did not show any significant differences. For example, the main reason advanced by a total proportion of 75% was that large is greener (see table 8.14).

Table 6.14 MAIN REASON FOR THE TIMING TO WORK IN SMALL BUSINESS BY UNIVERSITY RESPONDENT'S CATEGORY

Main Reason for the Timing to work in a Small business	University Respondent's Category		
	Student No. Row % Col. %	Graduate No. Row % Col. %	Total No. Row. %
Large is Greener	85 41.1 75.9	122 58.9 74.4	207 75.0
I will Work in Small Business to gain experience & capital	19 44.2 17.0	24 55.8 14.6	43 15.6
I Will Establish My Own Business After Working in Large	8 30.8 7.1	18 69.2 11.0	26 9.4
Column Total No. Column Total %	112 40.6	164 59.4	276 100.0

X^2 = 1 P = 0.5247 Cramer's V = 0.1 No. Missing = 159

The reasons given above were post coded from responses to an open ended question. A few quotations of the original rich qualitative responses, at this juncture, will break the monotony of quantitative analysis. The summarized reasons above varied widely as will be realised. Commenting on the need for experience, Simbeye, a first year student argued:

> I would first like to gain experience in a big well established company. Thereafter, I would join a small business with my ideas.

The same views were expressed by graduates. Siwale, a 1983 BBA graduate, then a regional manageress for copperbelt, in a national pharmaceutical company, said:

> The experience you get in a small business cannot be matched to a large business which is well established.

Students' and graduates' responses confirmed the first factor, incapacity of small firms, that would discourage graduates working in small firms discussed in section 6.2.2.2. They argued that small firms were financially constrained to attract graduates. Second, some of them did not like employing graduates. Third, they did not offer good salary, and good conditions of service. Some of these included lack of promotional prospects and opportunities for further training. Fourth, they were also seen as being prone to volatile present economic conditions. These views were expressed by those who said they would work in a small business "sometime in the future", "I don't know" and "not at all". The last group also maintained that they did not entertain the idea of working for an individual. A couple of commentators who wanted to work in a small firm within five years stated their presence would be recognised and would easily get promoted. Commenting on the dislike for graduates, Kapumba, a third year student thought:

> Most small businesses are owned by individuals who would rather employ their relatives or may not desire to employ graduates at all.

Noting the second issue of financial inability of small firms to offer graduates Seedat explained:

> Some small companies do not take highly qualified personnel due to lack of enough funds.

The third area highlighted was the incapacity of small firms to offer good conditions of service or prospects for advancement. This did not encourage respondents to join small businesses immediately upon graduation. Graduates had also similar views on this issue. Mutale, a third year student who thought he would join small firm in about three to five years argued:

> Immediately after graduation, there are no chances of a small business organisation sponsoring me for professional studies.

The fourth point raised for unwillingness to join small firms was their instability and inability to sustain volatile economic conditions, resulting in folding up. This view permeated through all years of study and among graduates. Dandiker, a second year student, for example, maintained:

> Small businesses can not be relied [upon] because their survival is uncertain in this Zambian economy. I would rather work in a large firm first and a small one later.

The four points raised above also related to those who had said "I don't know". Therefore grouping them among those who had misgivings about working in a small firm earlier was correct. Their main concern was however on the conditions of service and good prospects. This view was shared across all respondents. Konia, a third year student who had also selected the "I don't know category" for example, was doubtful whether he would work for a small business because

> I see no prospects of being offered [a chance for] further studies in small business.

Graduates also shared similar views. Lupunga, a 1982 BAc graduate, then a trainee manageress said she would not at all work for a small firm because:

> I don't think I can be offered more than what I am getting now.

Among those who said, they would "not at all" work for a small firm was the view that working for an individual was unacceptable to them. Akapelwa, a second year student flatly declined to do so by saying:

> I take it that when you say "small business", you mean a business owned by an individual. I therefore feel I can't work for an individual.

Similar views were expressed by graduates. Mumbi, a 1983 graduate flatly declined by saying "not at all" because:
"I can only work in a small business if I own it myself".

8.2.3.3 Summary on Factors Influencing to work in Small or Large

The overall findings on working in small and large business by both students and graduates therefore indicated that:

1) The majority, 77% in the case of students and 85% in case of graduates, had not worked in a small firm
2) A very small proportion of 23% and 15% respectively had worked in a small business for an average period of 9 and 5 months respectively
3) The majority of both groups (77% and 87%) did not intend to work in a small firm within a reasonable time. The main reason being that large was greener. The meaning of greener was highlighted by referring to their responses
4) In general, both groups had, however, favourable views on the factors that could influence them to work in small business as was seen on the section dealing with factors
5) They also had positive attitude on some factors that could influence them to work in large firms. But negative factors appeared to outweigh these.

Organisations in which students would like to work and their job expectations and graduates experiences in industry so far are next taken up in the next section.

8.2.4 STUDENTS' WORKING PROSPECTS AND GRADUATES' WORKING EXPERIENCES

In addition to investigating respondents' attitudes towards influencing factors for working in small firms and their experiences and prospects regarding the same, this study also examined the broader issue of respondents' general working prospects and experiences. In this section, attention was therefore turned to research findings regarding:

1) Students: a) Their types of prospective organisations
   b) Their job expectations.
2) Graduates: a) Types and sizes of organisations selected by them
   b) Levels of responsibility held by them
   c) Utilization of graduates by employers.

There were two aims for looking into these issues. The first was to find out whether respondents preferred large or small businesses in practice when they joined industry. The second was to discover the extent to which graduates advanced to higher levels of responsibility and how long it took them. When analysing results, a third aim however emerged. This was comparison of BBA and BAc degree holders in selecting different types and sizes of organisations, promotional prospects and the extent of acceptability of the BAc degree. Since analysis of the first two issues utilized almost the same research results which are discussed in chapter 8 which deals with acceptability of the BAc degree, and graduates' experiences, only comparison with students' prospects and new discussion will be presented here.

8.2.4.1 [redacted]' TYPES AND SIZES OF ORGANISATIONS

The results indicated that 88% of the students selected medium to large private or parastatal organisations as their main first organisation in which they would like to work after graduation. These were subcategorised into: 27% parastatal, 39% large private and 17% medium private organisations. Only about 2% would like to work in small businesses and 2% to form their own businesses. Analysis of graduates' preferred organisation, i.e. where graduate was working at the time of the study (assumed to be the preferred organisation) showed similar results. About 78% were working in medium to large private organisations, about 20% in government and 2% in small businesses (see table 8.15). The major single category was parastatal where 54% were working followed by large private firms. However, chi-square analysis showed that the differences between students and graduates were significant (see table 8.16).

Table 8.15 Basic Group Type of Graduate's Organisation now

TYPE OF ORGANISATION GRADUATES WAS WORKING IN	No.	%	VALID %	CUM %
PUBLIC	45	17.7	18.7	18.7
PARASTATAL	123	48.4	53.7	73.4
LARGE PRIVATE	35	13.8	15.3	88.6
MEDIUM PRIVATE	17	6.7	7.4	96.1
SMALL PRIVATE	9	3.5	3.9	100.0
DID NOT STATE	1	.4	MISSING	
NONE YET	24	9.4	MISSING	
TOTAL	254	100.0	100.0	

Table 6.16 MAIN ORGANISATION RESPONDENT PREFERS TO WORK IN BY UNIVERSITY RESPONDENT'S CATEGORY

MAIN ORGANISATION RESPONDENT PREFERS TO WORK IN	UNIVERSITY RESPONDENT CATEGORY		
	STUDENT No. Row % Col. %	GRADUATE No. Row % Col. %	Total No. Row. %
GOVERNMENT	12 21.1 7.1	45 78.9 19.7	57 14.3
MEDIUM OR LARGE PRIVATE ORGANISATION OR PARASTATALS	148 45.8 87.6	175 54.2 76.4	323 81.2
SMALL PRIVATE	4 30.8 2.4	9 69.2 3.9	13 3.3
OWN BUSINESS	4 100.0 2.4		4 1.0
OTHER	1 100.0 .6		1 .3
Column Total No. Column Total %	169 42.5	229 57.5	398 100.0

X^2 = 20 P = 0.0008 Cramer's V = 0.22

Some students however, realised that due to their nature of government sponsorship, they would most likely end up working in government in the first place (27% as opposed to 76% if they were free to choose). Nevertheless, a large percentage of 70% expected to most likely work in medium to large firms. Only 1% expected to work in small businesses. None expected to work in own business first.

The proportion of those who would like to work in the medium to large organisations was still high even taking into

consideration the bonding effect because the bonding was viewed as being ineffective as Akapelwa, a second year student said:

> The answer above is given with the idea that, as per my observation, the bonding (bursary) has no effect.

Table 6.17 FIRST ORGANISATION RESPONDENT HAS/WILL LIKELY WORK IN BY UNIVERSITY RESPONDENT'S CATEGORY

FIRST LIKELY ORGANISATION HAS / WILL WORK IN	UNIVERSITY RESPONDENT CATEGORY		
	STUDENT No. Row % Col. %	GRADUATE No. Row % Col. %	Total No. Row. %
GOVERNMENT	45 42.1 27.3	62 57.9 27.0	107 27.1
MEDIUM OR LARGE PRIVATE ORGANISATION OR PARASTATALS	115 42.0 69.7	159 58.0 69.1	274 69.4
SMALL PRIVATE	2 18.2 1.2	9 81.8 3.9	11 2.8
OTHER	3 100.0 1.8		3 .8
Column Total No. Column Total %	165 41.8	230 58.2	395 100.0

X^2 = 7 P = 0.0819 Cramer's V = 0.13 No. Missing = 40

When compared to graduates' working experiences, these were very similar. Research results also showed that the experiences of graduates for the first six years since the inception of the Copperbelt University had been that the basic type of first organisation in which 70% had been employed was the medium to large private and parastatal organisations while 27% had been employed in the government. These experiences were very similar

to undergraduates' expectations. The percentage distribution was 43% for parastatal, 27% for government, 16% for large private and 10% for medium private and only 4% for small private organisations. None stated own organisation as the first occupation. These results were not statistically different from students (see table 8.17). For detailed discussion of changes in graduates initial types of organisation between BBA and BAc, refer to chapter 8.8.2.1.1 and 8.8.2.1.2. These were not different.

The results have again confirmed lack of interest by both students and graduates to work in small firms and their inability in starting their own businesses.

The sizes of organisations, based on number of employees in employing businesses confirmed the earlier assertions that the majority of graduates were working in medium to large organisations. Refer to chapter 8.8.2.1.3 and tables 8.28 and 8A.1 for details.

It was not possible to directly compare SBIS organisational size preferences to national data since classifications in the later are not done according to size but to sector. However some insight may be had by examining formal sector employment in the government (table 8.18) and formal sector employment by nationality and sector (table 8.19). Table 8.18 shows that on the national level, 38% of employees were engaged in government service. This compared unfavourably with 20% for graduates who were employed in government at the time of the study.

Table 8.18: Formal Sector Employment, 1975 and 1980

a) Zambian employees	1975		1980	
i) Government service	No.	%	No	%
- Teachers	16,570	15	23,386	17
- Others	103,120	85	113,302	83
-Total	121,690	33	136,690	36
ii) Other Formal sector	243,640	67	224,290	62
iii) Total Formal sector employment	365,330	100	360,980	100
b) Non-Zambian employees	33,510	08	20,510	05
c) Total Employment in formal sector	398,840	100	381,490	100

Source: UNDP Technical paper No.1, Manpower & Development table 1 p.6. Originally from: Monthly Digest of Statistics, supplement 1978, 1985, Lusaka:CSO.

Table 8.19 Employees by Sector[1] by Nationality - 1980

Sector	NATIONALITY OF EMPLOYEES					
	ZAMBIAN NO.	ROW % COL %	NON-ZAMBIAN NO.	ROW % COL %	TOTAL NO.	ROW % COL %
PUBLIC	135750	96 38	5530	04 28	141280	37
PARASTATAL	136420	95 38	7770	05 39	144190	38
PRIVATE	87270	93 24	6560	07 33	93830	25
TOTAL	359440	95	19860	05	379300	100

Source: Report on Employment and Earnings 1980), Central Statistical office (CSO) April, 1983, Lusaka.

Table 8.18 gives the same picture that about 38% of Zambians were working in the government in 1980. But about 62% were in both parastatal and private. These statistics indicated that when compared to the national data, graduates tended to show more preference for this sector than for government.

8.2.4.2. STUDENTS' JOB EXPECTATIONS AND GRADUATES' LEVELS OF RESPONSIBILITY AND THEIR UTILISATION

The majority of both students and graduates preferred professional accountancy for their career (see chapter 8.8.1.3). About 38% of students thought they would start as professional accountants while 25% chose middle / senior management positions. None realised he would start as a management or accountant trainee. Those who wanted to own businesses were 8% only.

After leaving the university, the realities were however different. Only 7% claimed to have started as accountants, 12% started as management trainees, 25% did clerical duties and none started a business first. Table 8.20 shows differences between students' and graduates' occupational expectations and experiences. It will be noted that students' expectations were statistically different from graduates' experiences at 0.0000. It will be seen from discussions in chapter 8.8.2.1.4 that only about 27% of BAc graduates had actually attained the title of an accountant between 1981 and 1988. About 56% were still in the trainee assistant accountant category. The rest were involved in other types of jobs (see table 8.30).

Table 6.20 PREFERRED FIRST MAIN OCCUPATION BY UNIVERSITY RESPONDENT'S CATEGORY

PREFERRED FIRST MAIN OCCUPATION	UNIVERSITY RESPONDENT CATEGORY		
	STUDENT No. Row % Col. %	GRADUATE No. Row % Col. %	Total No. Row. %
START OWN BUSINESS	13 100.0 7.6		13 3.3
TEACHING IN SECONDARY SCHOOL / COLLEGE / UNIVERSITY	13 48.1 7.6	14 51.9 6.3	27 6.8
CLERICAL	9 14.1 5.3	55 85.9 24.6	64 16.2
ACCOUNTANT / MANAGEMENT TRAINEE		27 100.0 12.1	27 6.8
LOWER MANAGEMENT	2 15.4 1.2	11 84.6 4.9	13 3.3
MIDDLE / SENIOR MANAGEMENT	43 31.9 25.1	92 68.1 41.1	135 34.2
PROFESSIONAL ACCOUNTANT	67 79.8 39.2	17 20.2 7.6	84 21.3
TOP MANAGEMENT / PROFESSIONAL	16 100.0 9.4		16 4.1
OTHER	8 50.0 4.7	8 50.0 3.6	16 4.1
Column Total No.	171	224	395
Column Total %	43.3	56.7	100.0

X^2 = 138 P = 0.0000 Cramer's V = 0.59 No. Missing = 40

National occupational data was not obviously comparable to this study since classification in the later were aimed at a particular group. But table 6.21 would give an insight into the Zambian occupational proportional distribution. It will be noted that about the same proportion of 16% in both groups were doing clerical duties. But a very small proportion of 1% on the national level were involved in managerial and top executive positions.

Table 6.21 Employees by Major Occupational Group and Nationality 1983 in four line-of-rail provinces

Major Occupational Group	Zambian		Non-Zambian		Total	
	N	%TZ	N	%TZ	N	%Tot
Prof./techn./related	37,876	15	5,285	42	42,961	16
Admin./managerial	2,583	1	744	6	3,307	01
Clerical/related	38,925	16	818	6	40,741	15
Sales workers	4,583	2	321	3	4,904	02
Agr./forestry etc.	16,021	6	527	4	16,548	06
Production/related/ transport/equipment operators	114,886	46	4,188	33	119,074	45
Not stated	900	-	35	-	935	-
Total	252,134	100	12,668	100	264,802	100

Source: UNDP Technical paper No.1, Manpower & Development, table 3 P.8, 1987; originally from: CSO, 1983 Manpower Survey of Employees, Table 4.3:42; Table 10.5:151. Lusaka, draft.

TZ: Total Zambians; TNZ: Total Non-Zambians

Analysis of graduates' job titles in chapter 8.8.2.1.4 showed that a great percentage of 43% were holding positions of trainee accountant or assistant accountant. But 22% referred to themselves as accountants or senior accountants. Another 12% were management or bank trainee while 15% had attained positions of departmental or assistant managers. Their types of job descriptions were given as (see chapter 8.8.2.1.4 and table 8A.3 and for for a contrast between BBA and BAc see table 8A.4):

a) Branch or departmental supervision (28%)
b) Preparation of books of accounts and management reports (23%)
c) Auditing (12%) and
d) Departmental orientation activities for new recruits (11%).

Unemployment among SBIS graduates was not yet a problem as all, except 1%, normally got jobs within six months after leaving the University. The distribution was:

a) Before university 7%;
b) Before final examination 13%;
c) After final examination but before knowing results, 55%;
d) Three to six months after results 24%.

The two main methods of finding employment (table 8.22) were University's own placement scheme and personal contact with company, each accounting for 33% for a total of 66%. The share of employment through advertisement by employing companies was 14% only while employment through government bonding was 11% only. This was in spite of the fact that the government finances over 90% of students' population (CBU, 1988 letter to researcher).

Out of the 22 who were not in employment at the time of the study 10 (46%) attributed this to lack of jobs. But 7 said that there was too much corruption. Thus although tribalism, nepotism and favouritism is alleged to be prevalent in employing organisations in Zambia, this was not supported by research evidence as 4% only got employment through family contact with company.

Table 8.22 Distribution of Graduates' major method of getting first job

MAJOR METHOD OF OBTAINING FIRS JOB	No.	%	VALID %	CUM %
GOVERNMENT BONDING	25	9.8	10.9	10.9
UNIVERSITY PLACEMENT SCHEME	76	29.9	33.0	43.9
NEWSPAPER ADVERTISEMENT BY CO.,	33	13.0	14.3	58.3
PERSONAL CONTACT WITH COMPANY	75	29.5	32.6	90.9
OTHER	21	8.3	9.1	100.0
DID NOT STATE	2	.8	MISSING	
NOT ASKED	22	8.7	MISSING	
TOTAL	254	100.0	100.0	

The majority of graduates appeared to be dissatisfied with their current jobs as 73% of 229 had though of leaving their jobs. Refer to table 8.34 for statistical analysis between BBA and BAc. Nearly half (47%) of those who had contemplated leaving their jobs were actually looking for jobs at the time of the study (see tables 8.36 and 8.37). The main reasons advanced (table 8.23) were (see chapter 8.8.2.3 for details):

a) Get greener pastures (60%). These included getting more money, promotion, job security, better prospects and getting more experience.

b) Frustration relating to the job or organisation (30%).

Only 8% attributed their intended action to their desire to start a business.

Asked about the type of new organisation a graduate would join if he left the University next week, 80% testified that they would work for medium to large private or parastatal organisations. Those who declared they would join small businesses or start their own businesses were 7% and 9% respectively (see table 8A.7). A great majority 73% would be accountants while 22% would take up management jobs. Only 11% would be business owners. Those who would find the new job in the same industry as now were 45% while 54% would change the industry. These findings about original, present and new organisations as well as their present and new occupations strengthened the hypothesis that graduates did not select business ownership for their careers. But this issue is directly taken up in the next section. It is now time to summarise the findings so far.

Table 8.23 Distribution of Graduates' Reasons for wishing to Leave job

REASONS FOR WISHING TO LEAVE PRESENT JOB	No.	%	VALID %	CUM %
GET MORE MONEY	18	7.1	10.8	10.8
GET PROMOTED	3	1.2	1.8	12.7
GET SECURITY	7	2.8	4.2	16.9
BOREDOM	2	.8	1.2	18.1
TO START OWN BUSINESS	14	5.5	8.4	26.5
LACK OF PROSPECTS	45	17.7	27.1	53.6
GET INTERESTING JOB	19	7.5	11.4	65.1
TRAVEL / EMIGRATE	3	1.2	1.8	66.9
FRUSTRATION	29	11.4	17.5	84.3
GET MORE EXPERIENCE	26	10.2	15.7	100.0
DO NOT KNOW	2	.8	MISSING	
NOT ASKED	86	33.9	MISSING	
TOTAL	254	100.0	100.0	

6.2.4.3 Summary of Working Expectations and Experiences

One of the objectives of this study was to investigate students' job prospects and graduate's job experiences. Research findings revealed that:

a) The majority of students (88%) preferred employment in medium to large businesses, particularly the large private and parastatal organisations if they were free to choose.

b) When bonding requirements to the government were taken into account, the largest majority still thought they would end up working in medium to large private and parastatal organisations 70% while 27% realised that they would work for the government.

c) Graduates' main types of first organisations after leaving University were medium to large parastatal organisations, large private and medium private.

d) Frequent job changes took place as more graduates left small organisations and the government, striving to secure positions in parastatal, large private and medium private organisations. At the time of the study, more graduates were employed in these than at graduation 77% against 70%. But fewer were now employed in the government for example (20% now against 27% at the time of graduation).

e) Most graduates (80%) would still work for medium to large parastatal and private businesses if they were leaving University a week after the study. For most graduates their preferred jobs would still be in the accounting profession.

f) Students' and graduates' most preferred occupation was professional accountancy (39%).

g) Students and graduates did not opt for small business or for business ownership for their careers.

h) One person only among all the graduates had managed to start up his own business during a period of six years.

i) Unemployment among SBIS graduates was not yet a serious problem as almost all of them found employment within six months after graduation.

j) University placement scheme and personal contact with employment organisations were the basic methods of seeking employment.

k) Graduates were dissatisfied with their jobs or organisations as close to 73% had contemplated leaving and nearly half of them were actually looking for jobs at the time of the study.

l) The main reason for leaving was better prospects in other organisations.

6.2.5 STUDENTS' AND GRADUATES' PARENTAL BACKGROUND AND CHARACTERISTICS OF WORKING IN SMALL OR LARGE BUSINESS

The research study also investigated parental background and characteristics in relation to their influences if any towards:

a) students' and graduates' attitudes towards working in large or small businesses;

b) students' and graduates' business ownership or enthusiasm for owning by a majority, if any.

Item (b) is taken in the section 6.3 while (a) is taken up now. Results revealed that about 56% of students' fathers and a slightly larger percentage (62%) of graduates' fathers had attained primary education. But 24% and 18% respectively had obtained secondary education. Only 8% and a slightly larger

percentage of 13% of students' and graduates' fathers respectively had no education. However, 53% and 58% of students' and graduates' mothers respectively had attained primary education. But only 12% and 6% respectively had completed senior secondary education. About 28% of students' mothers and 34% of graduates' mothers had no schooling whatsoever (see tables 6A2.11 and 6A2.12):

These findings brought to light two points. First, that fathers were more educated than mothers. The differences were significant at 0.0000. Second, that parents of new university entrants were slightly more educated than the older generation.

Comparing these results to national data showed that university respondents' parents were more educated than the average Zambian. However, the finding that fathers were more educated than mothers was in agreement. Bardoville (UNDP, 1987:2) referred to national statistics (CSO, 1980: vol. II, Table 6.1.175) which indicated that in 1980 some

> "42.2 percent of the population 5 years and above was illiterate... and another 46.1 percent had between lower and upper primary school levels of educations.... A higher proportion of women (46.6%) compared to men (35.3%) had no schooling whatsoever...."

This meant that persons with no schooling and those with only primary school levels accounted for 88.3% of the population in 1980. He further reported that approximately 9.8% of the population had junior to senior secondary school level of education and only 0.2% had a college or university level of education. This meant that only 10% of the population had a senior secondary school to college / university level of education and training.

The evidence that university respondents' parents had better schooling than the average Zambian was a surprising finding. This was because Zambia has followed a free educational system from primary to university since independence. It could therefore have been expected that university entrants would come from families of all walks of life. The finding could therefore imply that parental educational background had influence on the level of education attained by the offsprings. That is coming from a home of educated parents was an encouragement to attain better education than the one parents had.

Students' and graduates' fathers' primary group of organisations where they had worked most were government (41%) and (38%), parastatal (23%) and (19%) and private (large, medium and small) (13%) and (14%) respectively. About 11% and 21% of students' and graduates' fathers respectively had been engaged in peasant farming (tables 6.24 and 6.25). These results compared favourably with national data, which it will be recalled had the following proportions: 38% (public) 38% (parastatal) and 24% (private). It should be noted that direct comparison was difficult since employment data for the parastatal sector until 1975 were included in the public sector (UNDP Technical paper No.1 p.20).

There was no prominent category for occupations for students' fathers. But these were for students' and graduates' fathers respectively unskilled, semi-skilled and skilled (21% and 15%), clerical (19% and 13%), supervisory, middle or senior management (16% and 16%). About 18% and 21% had been engaged in

peasant farming. A great percentage of students' mothers had not been engaged in gainful employment as shown in table 6.26. Of the few who had, the largest category was teaching at primary, secondary school or college level. The majority of graduates' mothers, 76% had not been employed (table 6.27).

Table 6.24 Distribution of Students' Father's Employing Organisation

STUDENT'S FATHER'S ORGANISATION	No.	%	VALID %
FARMING	19	10.5	10.9
GOVERNMENT	73	40.3	41.7
PARASTATAL ORGANISATION	42	23.2	24.0
PRIVATE ORGANISATION	23	12.7	13.1
OWN BUSINESS	13	7.2	7.4
OTHER	5	2.8	2.9
DONT KNOW / NOT STATED	6	3.3	MISSING
TOTAL	181	100.0	100.0

Table 6.25 Distribution of Graduate's Father's Employing Organisation

GRADUATE'S FATHER'S ORGANISATION	No.	%	VALID %	CUM %
FARMING	53	20.9	21.3	21.3
GOVERNMENT	95	37.4	38.2	59.4
PARASTATAL	46	18.9	19.3	78.7
PRIVATE	35	13.8	14.1	92.8
OWN BUSINESS	11	4.3	4.4	97.2
OTHER	5	2.0	2.0	99.2
NONE	2	.8	.8	100.0
DO NOT KNOW / NOT STATED	5	2.0	MISSING	
TOTAL	254	100.0	100.0	

Table 6.26 Distribution of Students' Parents' Occupation

	Student's Father			Student's Mother		
TYPE OF OCCUPATION	No.	%	VALID %	No.	%	VALID %
FARMING	33	18.2	19.1	33	18.2	34.4
UNSKILLED /SEMI-SKILLED / SKILLED	36	19.9	20.8	2	1.1	2.1
TEACHING: PRIMARY SECONDARY, COLLEGE UNIVERSITY	16	8.8	9.2	23	12.7	24.0
OWN BUSINESS	22	12.2	12.7	19	10.5	19.8
CLERICAL	35	19.3	20.2	15	8.3	15.6
SUPERVISORY, MIDDLE SENIOR MANAGEMENT	31	17.1	17.9	4	2.2	4.2
DO NOT KNOW	8	4.4	MISSING	85	47.0	MISSING
TOTAL	181	100.0	100.0	181	100.0	100.0

Table 6.27 Distribution of Graduates' Parents' Occupation

	Graduate's Father			Graduate's Mother		
TYPE OF ORGANISATION	No.	%	VALID %	No.	%	VALID %
NONE	3	1.2	1.2	104	40.9	42.1
FARMING	85	33.5	34.1	86	33.9	34.8
UNSKILLED / SEMI-SKILLED / SKILLED	39	15.4	15.7	7	2.8	2.8
TEACHING: PRIMARY SECONDARY,COLLEGE UNIVERSITY	28	11.0	11.2	17	6.7	6.9
OWN BUSINESS	19	7.5	7.6	20	7.9	8.1
CLERICAL	32	12.6	12.9	8	3.1	3.2
SUPERVISORY /MIDDLE SENIOR MANAGEMENT	39	15.4	15.7	5	2.0	2.0
OTHER	4	1.6	1.6			
DONT KNOW	5	2.0	MISSING	7	2.8	MISSING
TOTAL	254	100.0	100.0	254	100.0	100.0

In summary, findings indicated that about half of their fathers had attained primary education while a further small percentage had accomplished secondary education. About one in three mothers had no education while one in two had attained primary education. But one in ten had completed secondary school. About twice of the fathers had worked mainly for the government compared to those who had worked in parastatal organisations. Again more fathers had worked for the government than in private firms, the ratio being three to one. The majority of mothers had however not been engaged in gainful employment.

It therefore appeared that University students and graduates came form different backgrounds in terms of education, working organisations than they were developing themselves.

8.2.8 HYPOTHESIS TESTING

Evidence so far has led to rejecting the null hypothesis which was that there was no difference in students' or graduates' attitudes in selecting salaried employment between small and large firms. The alternative hypothesis that there was a difference and in particular most students and graduates seek employment in large firms as opposed to small firms should be accepted.

Research results however also revealed that despite their preferences for large firms, they had positive attitudes towards factors that influence them to work in small firms. These

factors were belongingness and active participation. Two negative factors identified were financial and human resource incapacity of small firms, and poor relationships with non-university fellow workers.

Respondents' parents' backgrounds were different from the ones they were leading. Their parents had a lower education compared to themselves, particularly their mothers, most of whom 4 out of 5 had primary or no education at all. The majority of their fathers had worked in the government and parastatal organisations, holding very low, unskilled, semi-skilled or skilled jobs. Close to 4 out 5 of their mothers had not done any formal employment.

6.3 GRADUATES AND STUDENTS ATTITUDES TOWARDS STARTING BUSINESSES

6.3.1. INTRODUCTION

Students at the Copperbelt University appeared to exhibit marxist behaviour and views. In the past, the University had experienced several disturbances partly influenced by such beliefs as explained in chapters one and two. The advice of the former principal, now vice-chancellor, Professor M. Kashoki to students was highlighted.

From such actions and pronouncements, it could be assumed that some students at the Copperbelt University, would not like to pursue business ownership as a career since that would lead to accumulation of wealth. In addition, it could also be assumed that the type of training they received, which emphasized occupying top managerial positions could influence others to detest business ownership or working in small businesses.

In this section, concentration was on examining field work findings to test the following null and alternative hypotheses presented in chapter 2:

Hypothesis

H_o: There is no difference in students andr graduates attitudes. They have no negative attitudes towards selecting business ownership for their careers.

H_1: Students and graduates have negative attitudes towards selecting business ownership for their careers. They prefer employment in large businesses.

6.3.2 STUDENTS' AND GRADUATES' FIRST ACTIVITY

In order to establish students' and graduates' inclinations towards selecting business ownership as their career, several questions relating to this issue were addressed to them. One of the questions asked students to indicate what their preferred first activity after leaving university would be. Graduates of 1981 to 1988 were asked what their first activity was after graduating. Their responses were analysed by comparing them to those of practising businessmen who had been asked the same question. The same variable was analysed separately for the three groups. Chi-square technique described in appendix 5A2 was used for testing whether or not the results for each of the three responding groups were significant. It was also applied to determine whether differences between graduates and students were significant. Finally, the results of SBIS respondents were compared to those of the businessmen and tested.

The combined overall results for both students and graduates revealed that the greatest majority of 85% of all respondents opted for a salaried job (table 6.28). These were split into 56% graduates and 29% students out of the total respondents. When concentration was made on those who chose salaried employment 66% were graduates while 34% were students. The study further showed that 8% of the total respondents chose professional accounting studies. But only 2% preferred to start their own businesses. About 99% (out of 232 graduates excluding 22 who had not yet found any gainful activity) had actually gone into salaried employment. The proportion for students was less at 67% (121 out of 181) who had indicated salaried employment as their first

activity. Further the entire 2% of those who selected starting their own businesses were students. These differences between graduates and students were significant at 0.0000. It should however be noted that the comparison was between expectations of students versus actual experiences of graduates.

These findings were then analysed separately for students and graduates to find out whether there were any significant differences between first activity and other variables such as sex, type of preferred degree or year of study (for students) or graduation (for graduates)

Table 6.28 RESPONDENT'S PREFERRED FIRST ACTIVITY AFTER GRADUATION BY UNIVERSITY REPONDENT'S CATEGORY

PREFERRED FIRST ACTIVITY	UNIVERSITY RESPONDENT CATEGORY		
	STUDENT No. Row % Col. %	GRADUATE No. Row % Col. %	Total No. Row. %
SALARIED JOB	121 34.5 66.9	230 65.5 99.1	351 85.0
START OWN BUSINESS	8 100.0 4.4		8 1.9
PROFESSIONAL ACCOUNTANTING STUDIES	33 100.0 18.2		33 8.0
OTHER STUDIES	19 90.5 10.5	2 9.5 .9	21 5.1
Column Total No. Column Total %	181 43.8	232 56.2	413 100.0

X^2 = 84 P = 0.0000 Cramer's V = 0.45 No. Missing = 22

8.3.2.1. STUDENT'S FIRST ACTIVITY

Results indicated that a total of 121 out of 181 (67%) students selected salaried jobs while only 4% chose starting their own businesses. The rest indicated professional accountancy (18%) and other studies (11%).

When results were broken down according to sex and year of study, overall findings showed that there were no significant differences at the highest cut off point of 0.05. on the main issue of selecting salaried employment as this was about 63% for each group.

When results were broken down according to type of preferred degree, findings showed that a significant difference existed at 0.0003. In particular there was a larger proportion of Bachelor of Business Administration (BBA) hopefuls accounting for 71% who preferred salaried employment compared to 65% of Bachelor of Accounting (BAc). This difference was basically due to the need by 24% of BAc prospective graduands to pursue professional accountancy qualifications while only 2% of BBA wished to do so. Further, the opposite was true for BAc hopefuls in that 23% wished to pursue other studies while this was the case for only 6% of the BAc expectants.

Tracing down the differences in type of degree by holding down sex, resulted in a significant difference among males at 0.0007, but not among females in that about 22% of BAc chose professional accounting studies while 2% of BBA did so. However the proportions were about the same (66% and 67%) as regards the main issue of selecting salaried employment first.

These differences in expectations regarding the preferred study after graduation were confirmed by a different question which sought to discover what students' preferred first study was. A total of 55% chose professional accounting qualifications, 13% professional management studies, 17% masters, PhD or other qualifications. Only 15% did not give any preference. When broken down by type of preferred degree, the differences between BAc and BBA were significant at 0.0000. Refer to chapter 8.8.1.3.1 and table 8.23 for detailed presentation. These significant differences between 'accountants' and business 'administrators' were true regardless of the students' year of study or sex (i.e. when these were held constant). However, sex or year of study '*per se*' had no influence on the choice of first study. Thus the inherent main difference was the type of degree the student was expecting to opt for.

On the whole, the findings revealed that the majority of students preferred to follow salaried employment path for their career as opposed to starting their own businesses. But more BBA hopefuls were contemplating choosing salaried employment than BAc prospective graduands who wanted to obtain professional accounting qualifications first.

This second finding would tend to show that the critical factor in influencing the preferred first activity was the type of degree a student was aspiring to select in his third year of study. BBA potential graduates therefore appeared to be contented with their first degree while BAc hopefuls felt insecure with the first degree.

This finding on a felt need by potential accounting graduates also tended to agree with results presented in chapter 8.8.2.2 when dealing with acceptance of the BAc degree and the experiences of the graduates who were already in the field. The majority had or were in the process of obtaining professional accounting qualifications.

Table 8.29 STUDENT'S PREFERRED FIRST MAIN ACTIVITY AFTER GRADUATION BY PREFERRED TYPE OF DEGREE

PREFERRED MAIN ACTIVITY	PREFERRED TYPE OF DEGREE		
	(B.A) BUSINESS ADMIN-ISTRATION	(BAc) ACCOUNTANCY	
	No. Row % Col. %	No. Row % Col. %	Total No. Row. %
SALARIED JOB	28 28.3 66.7	71 71.7 65.7	99 66.0
START OWN BUSINESS	2 25.0 4.8	6 75.0 5.6	8 5.3
PROFESSIONAL ACCOUNTING STUDIES	1 4.0 2.4	24 96.0 22.2	25 16.7
OTHER STUDIES	11 61.1 26.2	7 38.9 6.5	18 12.0
Column Total No.	42	108	150
Column Total %	28.0	72.0	100.0

X^2 = 17 P = 0.0007 Cramer's V = 0.34

8.3.2.2. GRADUATES FIRST ACTIVITY

Returning to the issue of preferred first activity, when the results of graduates of 1981 to 1988 were analysed, these revealed that the largest majority of 230 out 254 or 91% had sought employment first (table 8.30). One person only went straight for professional accounting studies and another did a masters degree. None took up own business ownership as a career. The rest (9%) had not yet secured employment. This group was from the 1988 graduands.

Although the status of unemployment among the last group could be viewed as a temporary feature since only three months had elapsed after graduation before the study was conducted, one surprising finding was that there was a difference between males and females. About 93% of males had obtained jobs while 81% of females did so. Again only 7% of males were unemployed, but 19% of females were not working. Although the data was combined for all the graduates from 1981 to 1988, these differences were statistically significant at 0.0277.

When those who were not employed were excluded, results showed that 99% had selected salaried job as the first occupation since the inception of the school. As would be expected with such an overwhelming percentage of job seekers compared to other options, sex, type of degree or year of graduation had no influence. For example analysis by type of degree showed that 98% and 99% of BBA and BAc respectively chose salaried employment. The significance was 1.0 and the correlation

of coefficients were 0.05 for phi and 0.05 for contingency coefficient. The high level of significance at 1.0 showed that the two groups were the same. The weak correlation coefficients confirmed this very weak relationship.

Preferences for professional accounting studies though not apparent in this analysis was shown to be very high when preferences for further studies and other major qualifications were analysed in (chapter 8.8.1.3.2, see particularly table 8.24)

Table 8.30 GRADUATES FIRST ACTIVITY AFTER GRADUATION BY GRADUATE'S TYPE OF SBIS DEGREE

PREFERRED MAIN ACTIVITY	GRADUATE'S TYPE OF DEGREE		
	(B.A) BUSINESS ADMIN-ISTRATION	(BAc) ACCOUNTANCY	
	No. Row % Col. %	No. Row % Col. %	Total No. Row. %
SALARIED JOB	58 25.2 98.3	172 74.8 99.4	230 99.1
STUDIES	1 50.0 1.7	1 50.0 .6	2 .9
Column Total No.	59	173	232
Column Total %	25.4	74.6	100.0

X^2 = 0 P = 1.0000 Phi = 0.05 No. Missing = 22

8.3.2.3. STUDENT'S, GRADUATE'S AND BUSINESSMAN'S FIRST ACTIVITY

These subtle findings regarding opting for salaried employment as opposed to selecting self-employment were compared to experiences of practising businessmen in Zambia. There were two purposes for this. The first was to find out whether students and graduates had inherent negative attitudes towards business ownership. The second was to investigate whether these findings had any bearing on the norm of the Zambian society.

The combined results for the three responding groups revealed that a total of 83% had sought salaried employment, 4% opted for own business and 13% other. These results were very similar to SBIS findings where a proportion of 85% of the combined respondents had sought paid employment. But only 2% had opted for own business. Overall findings however revealed that although the students and graduates were similar to businessmen on the aspect of seeking employment first, they were significantly different at 0.0000. Specifically, a larger proportion of 99% of graduates had sought salaried employment compared to 87% of prospective graduates (students) and 78% of businessmen. However, the greatest percentage of those who opted for business ownership as the first activity were businessmen at 9% followed by students at 4% while no graduates had actually done so.

What was hidden in this analysis but discovered upon further analysis of businessmen's questionnaire was the fact that all the 9% (or 16 businessmen) were foreigners, most of them of Asian origin. When only Zambian businessmen and graduates were included in this analysis, evidence confirmed that 95% of them had sought

employment first. But only 1% had started their own businesses. All those who had selected entrepreneurship were businessmen, accounting for 5% of their number while there was no graduate. Thus 83% of Zambian businessmen were first employed while the percentage was 99% for graduates as seen earlier (see tables 6.31(a) and (b)). These tables exclude students since they were still under training. It would therefore appear that there was no difference among Zambians (students, graduates and businessmen) in seeking employment as the first option.

Table 6.31(a) Crosstab of first activity by all businessmen & graduates

MAIN FIRST ACTIVITY AFTER SCHOOL	RESPONDENT'S GROUP CATEGORY: GRADUATE	BUSINESS OWNER (ALL)	ROW TOTAL
	No. / Row % / Col. %	No. / Row % / Col. %	No. / Total / Row %
SALARIED JOB	230 / 63.0 / 99.1	133 / 37.0 / 78.0	363 / 90.1
STARTED OWN BUSINESS		16 / 100.0 / 9.2	16 / 4.0
OTHER	2 / 8.3 / .9	22 / 91.7 / 12.7	24 / 5.9
Column Total No.	232	173	405
Column Total %	57.3	42.7	100.0

χ^2 = 30 P = 0.0000 Cramer's V = 0.35
No. Missing = 248

Table 6.31(b) Crosstab of graduates' and Zambian businessmen's first activity by type of respondent

MAIN FIRST ACTIVITY AFTER SCHOOL	TYPE OF ZAMBIAN RESPONDENT: GRADUATE	ZAMBIAN BUSINESS OWNER	ROW TOTAL
	No. / Row % / Col. %	No. / Row % / Col. %	No. / Total / Row %
SALARIED JOB	230 / 77.2 / 99.1	68 / 22.8 / 82.9	298 / 94.9
STARTED OWN BUSINESS		4 / 100.0 / 4.9	4 / 1.3
OTHER	2 / 16.7 / .9	10 / 83.3 / 12.2	12 / 3.8
Column Total No.	232	82	314
Column Total %	73.9	26.1	100.0

χ^2 = 33 P = 0.0000 Cramer's V = 0.33
No. Missing = 339

6.3.3 STUDENT'S AND GRADUATE'S PLANS ABOUT STARTING A BUSINESS

The analysis above has shown that there was a general tendency among Zambians to seek employment first. But it does not rule out the possibility that students and graduates had negative attitudes towards business formation. After all, there could have been some other reasons, as discussed above, which could have forced them to opt for salaried employment.

Therefore in order to ascertain whether students were ideologically opposed to owning businesses, *'per se'* and if not whether they were serious, a different question asked for the time when the student planned to start a business. To find out whether graduates still lived up to their overt Marxist views and whether their failure in selecting business ownership as their first occupation, when they went into the real world, had any bearing on such views, they were specifically asked several questions relating to business ownership. One question sought for the time when they planned to start a business. The results were analysed separately and then later combined to find if there were significant differences between the two groups. The difference between proportions, using the combined approach, benefiting from chi-square analysis was adopted.

The combined approach revealed that the greatest majority of 83% would like to form a business, but about 11% did not know. A very small minority of 6% vowed that they would not at all own one. About 85% of students and 82% of graduates stated they would like to own a business. Only 7% of students and 5% of graduates said they would not at all own one. There was no statistical

difference between the two groups since the prob value was 0.09 (table 8.32). Both Cramer's V and contingency coefficient were about 0.10, showing a very weak relationship.

Their intentions did not however reflect that this would take place in the near future, as the time was indefinite when asked about the time they would like to form a business. The greatest majority of 84% indicated this would be sometime in the future. Only 16% said they would do so between one to ten years. One graduate only who had already formed a business indicated "immediately". Again there was no statistical difference as the prob value was 0.46. The distribution between the two groups was 86% and 82% for sometime in the future, and 14% and 17% for one to ten years for students and graduates respectively.

TABLE 8 32 WHETHER RESPONDENT WOULD LIKE TO START BUSINESS BY UNIVERSITY REPONDENT'S CATEGORY

WHETHER RESPONDENT WOULD LIKE TO START A BUSINESS	UNIVERSITY RESPONDENT CATEGORY		
	STUDENT No. Row % Col. %	GRADUATE No. Row % Col. %	Total No. Row. %
NOT AT ALL	13 54.2 7.3	11 45.8 4.5	24 5.6
YES	152 42.8 85.4	203 57.2 82.2	355 83.5
DO NOT KNOW	13 28.3 7.3	33 71.7 13.4	46 10.8
Column Total No.	178	247	425
Column Total %	41.9	58.1	100.0

X^2 = 5 P = 0.08 Cramer's V = 0.11 No. Missing = 10

6.3.3.1 STUDENT'S TIMING IN STARTING A BUSINESS

When separate results were considered, the overall results did not alter as the greatest majority of 85% of the students wished to start a business while 7% did not. This finding was true regardless of the year of study, and intended type of degree. However there was a significant difference between males and females (table 6.33). The prob value was 0.0062. More males accounting for 95% preferred to start while 5% did not know compared to females proportions of 77% and 23%.

Table 6.33 WHETHER STUDENT WOULD LIKE TO START BUSINESS BY STUDENT'S SEX

WHETHER STUDENT WOULD LIKE TO START A BUSINESS	SEX OF STUDENT		
	MALE No. Row % Col. %	FEMALE No. Row % Col. %	Total No. Row. %
NOT AT ALL	8 61.5 5.4	5 38.5 16.1	13 7.3
YES	132 66.8 89.8	20 13.2 64.5	152 85.4
DO NOT KNOW	7 53.8 4.8	6 46.2 19.4	13 7.3
Column Total No. Column Total %	147 82.6	31 17.4	178 100.0

X^2 = 13 P = 0.0012 Cramer's V = 0.27 No. Missing = 3

When either year of study or sex was held constant, type of degree had no influence on the main time that the student wished to form a business. When type of degree was held constant, there

was no difference among first to third year business administration students. But significant difference existed among accounting students. The prob value was 0.05 while Cramer's V and Contingency Coefficients were each about 0.2. In particular more students intending to obtain BAc who had stayed longer at the University wanted to form businesses sooner than new comers (see table 6.34). That is a smallest proportion of 3% of first year students, 9% of second year students and 21% of third year students hoped to form businesses within a period of ten years. But 97%, 91% and 79% of first, second and third year students respectively wanted to form businesses sometime in future.

This implied that among accounting students, interest in business start up increased with seniority. The low correlation of 0.2 indicated the existence of some relationship, though weak. The explanation as to why this would be the case only among prospective accountants was puzzling.

Table 6.34 MAIN TIME WHEN STUDENT WOULD LIKE TO START BUSINESS BY YEAR OF STUDY IN 1985/86

MAIN TIME STUDENT WOULD LIKE TO START BUSINESS	YEAR OF STUDY IN 1985/86			
	1ST YEAR	2ND YEAR	3RD YEAR	Total
	No. Row % Col. %	No. Row % Col. %	No. Row % Col.%	No. Row. %
ONE TO TEN YRS	1 7.7 3.2	3 23.1 8.6	9 69.2 20.9	13 11.9
SOMETIME IN FUT	30 31.3 96.8	32 33.3 91.4	34 35.4 79.1	96 88.1
Column Total No.	31	35	43	109
Column Total %	28.4	32.1	39.4	100.0

X^2 = 6 P = 0.0516 Cramer's V = 0.23 No. Missing = 29

6.3.3.2 GRADUATE'S TIMING IN STARTING A BUSINESS

In order to discover whether graduates' customary Marxist outward behaviour and teachings while at the University were still prevalent when they went in industry, they were specifically asked several questions relating to business ownership, timing for start up, reasons why they wanted to own a business and preparations they were making for commencing one.

Results indicated that 11 graduates or 4% only would not at all own a business, 3% did not state, 13% did not know but 80% were positive. Those who would "not at all own " were further asked for reasons. One person only stated that it was immoral and therefore against his principles since he did not "belong to the clan of money grabbers".

When those who did not state were excluded, and analysis broken down by type of degree and Basic year of graduation (grouped into 3 sets of two years), findings were not significant. A total of about 83% were positive, 14% "did not know" and 4% "would not at all" own one.

When sex was considered, this proved to be an important variable as differences between males and females were significant at 0.0226 (table 6.35). In fact it was quite revealing that more females accounting for 13% compared to male's proportion of 3% had said "not at all". Yet females were not proponents of Marxism while at the campus. This therefore showed that only a very small proportion of males accounting for 2% of all respondents with valid data were opposed to business ownership, for various reasons. Returning to those who had said

they would like to own a business, there were again significant differences between males' proportion of 84% compared to that of females of 73%.

It will be recalled that in the case of students' analysis presented in the previous section, differences between males and females wishing to start businesses were also statistically significant. An immediate explanation as to why this had to be the case was not easily available other than the traditional old view, the world over, that a "woman's place was in the kitchen". It would appear that women have not yet emancipated themselves from men's domination in various walks of life. This should however not be surprising considering that Zambia has been independent for 24 years only. As was explained in the back ground chapter, women used to remain in villages while men went to work in towns. At present, there are also more men who are better educated and in full time employment than women, as seen earlier in this chapter. When it comes to business ownership in Zambia, next explained in chapter 7, men were by far in the majority accounting for 91% of those owning businesses.

The next analysis was concerned only with those who were not opposed to business ownership to find out whether they were serious in their plans. They were asked when they would like to start a business. Only one person reported owning a business already while 17% would do so within 10 years and 82% would own one some time in the future. There were no statistical differences among BBA and BAc, males and females and year of graduation. The reasons for wishing to, the timing for and preparations for (in the case of graduates) business ownership are now presented starting with students.

TABLE 6.35 WHETHER GRADUATE WOULD START BUSINESS BY GRADUATE'S SEX

WHETHER GRADUATE WOULD LIKE TO START A BUSINESS	SEX OF GRADUATE		
	MALE No. Row % Col. %	FEMALE No. Row % Col. %	Total No. Row. %
NOT AT ALL	6 54.5 2.9	5 45.5 12.5	11 4.5
YES	174 85.7 84.1	29 14.3 72.5	203 82.2
DONT KNOW	27 81.8 13.0	6 18.2 15.0	33 13.4
Column Total No. Column Total %	207 83.8	40 16.2	247 100.0

X^2 = 8 P = 0.0226 Cramer's V = 0.18 No. Missing = 7

TABLE 6.36 WHEN GRADUATE WOULD LIKE TO START A BUSINESS BY GRADUATE'S TYPE OF DEGREE

MAIN TIME TO START BUSINESS	GRADUATE'S TYPE OF DEGREE		
	(B.A) BUSINESS ADMIN-ISTRATION No. Row % Col. %	(BAc) ACCOUNTANCY No. Row % Col. %	Total No. Row. %
I ALREADY HAVE BUSINESS		1 100.0 .7	1 .5
ONE TO TEN YEARS	10 28.6 19.2	25 71.4 16.6	35 17.2
SOMETIME IN THE FUTURE	42 25.1 80.8	125 74.9 82.8	167 82.3
Column Total No. Column Total %	52 25.6	151 74.4	203 100.0

X^2 = .5 P = 0.7896 Cramer's V = 0.05 No. Missing = 51

6.3.3.3 STUDENT'S REASONS FOR THE TIMING IN STARTING A BUSINESS

The main reason advanced by 71% (of students who wanted to start businesses) for such indefinite period was the need to get capital or experience or both. About 6% wanted to supplement their income. A proportion of 23% gave different reasons. There was no statistical significance between BAc and BBA aspirants or among the three years of study. This was true even when year of study was held constant, type of degree had no influence. The converse was also true when type of degree was held constant.

Table 6.37 STUDENT'S MAIN REASON FOR THE TIMING TO START BUSINESS BY STUDENT'S SEX

WHETHER STUDENT WOULD LIKE TO START A BUSINESS	SEX OF STUDENT		
	MALE No. Row % Col. %	FEMALE No. Row % Col. %	Total No. Row. %
GET CAPITAL / EXPERIENCE	100 90.1 75.2	11 9.9 45.8	111 70.7
SUPPLEMENT INCOME / FOR SECURITY REASONS	7 70.0 5.3	3 30.0 12.5	10 6.4
OTHER	26 72.2 19.5	10 27.8 41.7	36 22.9
Column Total No. Column Total %	133 84.7	24 15.3	157 100.0

X^2 = 8 P = 0.0144 Cramer's V = 0.23 No. Missing = 24

There was however a significant difference at 0.0144 among males and females (table 6.37) as was the case with wishing to start business. On one hand, more males accounting for 75% wanted

to get experience, 5% to supplement their income while 20% gave other reasons. On the other hand, a lower proportion of 46% of females wanted to get capital or experience while 13% gave supplementing their income as the main reason for wishing to go into business while 42% gave other reasons. This difference in perception of capital and experience as the most critical issue by males while females did not was a surprise finding.

A few quotations from the original responses will vividly reveal the constraints that students thought would inhibit them from starting businesses. Commenting on lack of resources to enable them to start a businesses, Brown, a first year student argued:

> Establishing a business, it be, small or large requires proper planning, accumulation of enough capital and indeed the gaining of wider experience on how to run the business efficiently. As for newly graduated students with either a B.A. or BAc degree, with ... nothing to start a business, this will be practically impossible.

The same view was true among second and third year students. Chubili, a second year, for instance said:

> I need enough capital to start my own business because I come [from] a poor family such that I can't provide enough money.

Baker, a second year student was more certain when he said:

> I need to have capital. Thus, I have to work and save money to start it. I am optimistic that at any point in time, I [ought] to have my own business, having acquired the knowledge and some sort of capital.

Some of those who said "I don't know" and "sometime in the future" explained why they stated so. Rosen, a third year business administration student capped it all when she qualified her response as:

> The answer would have been (a) [immediately after graduation], but I foresee a very big constraint - lack of starting capital. I have keen interest in small businesses

such that if I had to equip myself just before graduation, starting a business immediately after graduation would be the best career I would indulge in. Therefore, I cannot be specific about when I would start one.

It appeared that respondents' expressions were serious enough. Mutale, a third year student for example thought it was more challenging owning a business than working when he stated:

> After some years of working experience, I will have raised enough funds to start my own business and I will have the relevant professional experience. Own business is more challenging than being employed.

These views about the importance of capital and the difficulties potential small businessmen anticipated were supplemented by responses of practising businessmen, analysed in full details later in the next chapter. A Lusaka businessman, Haambote, also commented:

> Finance is the critical issue. A reasonable financial background to enable him to meet requirements of lending institutions.... The conditions do not favour 90% of Zambians. How can a college, ... university graduate or retired person raise capital required or the security that is required? We are still very poor.... Equity contribution required is too high even if he has worked for 30 years.

Katumya, a general manager of Tata Zambia Ltd., a subsidiary of an overseas large Indian company observed and advised:

> I feel a graduate is sound enough in terms of education. They must also have some working experience of two or three years... The classroom courses should be given by people who have worked in business before. Too much of academics does not help a person to become a good entrepreneur.

The results showed that students were positively predisposed to owning business. It was therefore possible to conclude that students' ostentatious behaviour and pronouncements propagating a working class society while denouncing property and business ownership as petty bourgeois tendencies did not reflect their inherent beliefs.

8.3.3.4. GRADUATES' REASONS FOR WISHING TO OWN A BUSINESS

Asked about the reason for wishing to own business, the main reasons advanced were:

a) personal achievement/ autonomy (58%);
b) make more money than being employed (15%)
c) help the country (10%) and
d) has skills / education (7%).

Commenting on the motives for business start ups, Kasonde, a 1981 graduate who was a financial accountant said:

> Satisfaction in seeing the business grow and the independence to determine the course of business.

There were some differences between BBA and BAc as the distributions were 48% and 62% for personal autonomy respectively. Again 23% of BBA wanted to help the country compared to 17% BAc. A proportion of 17% BBA wanted to make more money compared to 14% BAc. When it came to males versus females, about the same proportion of males of 58% compared to 61% indicated personal achievement or autonomy. But 12% of males compared to 29% of females gave making money as the main reason. Finally, 21% males compared to 7% females said they would like to help the country. These differences were however not statistically significant. The same conclusion was true for year of graduation.

8.3.3.5 TYPE OF GRADUATE'S BUSINESS RELATED TO JOB / INDUSTRY

When asked about the type of business they would own, 49% of graduates said jobs would be related to their present job or industry while 34% said they would not be related and 17% mentioned other categories. There were no statistical differences when sex, type of degree and year of graduation were considered.

6.3.3.6. PREPARATIONS FOR STARTING BUSINESS

In order to establish whether business ownership intentions were backed up with any concrete plans, graduates were asked to indicate any serious preparations that they had undertaken. Leaving out those who were not asked this particular question or did not state, 132 out of 196 or 67% had not started any serious preparations while 33% had.

This finding that 1 out of 3 had already started making preparations was unexpected but was an important outcome. About the same ratio was found to be true when sex, type of degree and year of graduation were analysed. There were no significant differences when sex and type of degree were broken down.

There was however a significant difference of 0.0341 when year of graduation was considered (table 6.38). In particular, the later group of 1985 to 1986 was the least in making preparations as would be expected, as the percentage was 22% while 78% were not. Surprisingly 1983/1984 cohort had a higher proportion of 44% who were making preparations compared to the 1981/1982 set whose percentage was 32%. This was surprising because one would have expected that the group which graduated earlier would have been more ready than the later group.

Those who had started preparations were further asked to verify the kind of preparations. But only 1 stated he already had a business, 2 (3%) were getting loan capital, 3 (5%) were looking for a partner, 7 (12%) were looking for premises. The great majority only claimed that they were making savings (43%) and training for extra skills (33%).

Table 6.38 WHETHER GRADUATE HAS BEGAN ANY SERIOUS PREPARATIONS BY BASIC YEAR OF GRADUATION FROM SBIS

WHETHER SERIOUS PREPARATIONS TAKEN	MAIN PERIOD OF GRADUATION			
	1981 TO 1982 No. Row % Col. %	1983 TO 1984 No. Row % Col. %	1985 TO 1986 No. Row % Col.%	Total No. Row. %
NO	38 30.2 67.9	39 31.0 56.5	49 38.9 77.8	126 67.0
YES	18 29.0 32.1	30 48.4 43.5	14 22.6 22.2	62 33.0
Column Total No. Column Total %	56 29.8	69 36.7	63 33.5	188 100.0

X^2 = 7 P = 0.0341 Cramer's V = 0.19 No. Missing = 66

6.3.3.7 CONCLUSION ON ATTITUDES TO BUSINESS START UPS

Plausible findings therefore indicated that graduates' conspicuous marxist behaviour and profound marxist views while on campus did not reflect their intrinsic values. They had positive attitudes towards business formation. It would appear that such overt tendencies :

(1) are taken by students as jokes;

(2) such views do not reflect their true values and consequently they evaporate immediately after leaving the university;

(3) are deemed as a necessary process of growth and a expression of independent thought while going through the university;

(4) are caused by a tiny minority who influence others to disrupt the smooth running of the university;

(5) are correct reflections of their beliefs.

But students' results, who were still on campus would tend to support the first four propositions. These results would also tend to reveal that graduates would be prepared to go into business ownership upon graduation if they had the means to do so.

The main findings were therefore that although the potential entrepreneurs, students and graduates, were positive towards business ownership, they could not be counted upon to be a major force in the drive of forming businesses to mop up youth unemployment, partly because of lack of capital or experience.

8.3.3.8. PARENTAL CHARACTERISTICS ON STARTING BUSINESSES

The research study also investigated parental background and characteristics in relation to:

Students' and graduates' business ownership or enthusiasm for owning by a majority, if any.

Results revealed that about 56% of students' fathers had attained primary education and 24% secondary education. Only 8% had no education. However, 28% of mothers had no education while 53% had attained primary education. Only 12% had completed senior secondary education.

A relatively larger percentage (82%) of graduates' fathers had gone through primary level while 18% had obtained secondary school certificates. About 13% had no education. A similar trend to students' mothers existed even here for graduates as 34% had no education, 58% had completed primary school while 8% had gone as far as senior secondary level.

When students' and graduates father's and mother's educational levels were compared, there were no statistical differences between students and graduates.

It was discovered that 69% of students' fathers had not owned a business while 27% had done so. Among those who had owned, the main type was retail shops, accounting for 59%. Results also revealed that 74% of students' mothers had not owned a business while 25% had done so. The majority, representing 57%, owned market stands while another small proportion of 21% owned retail shops.

When graduates' fathers were considered, similar findings were disclosed as 74% of the fathers had not owned a business while 25% had done so. The main type of business owned by 57% was retail shop. A larger percentage of mothers (87%) had not owned a business. Again, as with students, the most common type of business ownership was a market stand, accounting for 28% followed by retail (24%). These differences between students' and graduates' parents were not statistically significant when compared.

An attempt was made to find out whether there was any relationship between preparing for business start up and owning of a business by a graduate's father. Evidence showed that there were no statistical differences between those who were making preparations and those who were not as regards whether or not their fathers owned a business. Results also showed that there were no statistical differences in owning businesses by fathers of BBA and BAc graduates. The same conclusion was arrived at when year of graduation and graduate's father's business ownership were considered.

In summary, findings indicated that although students and graduates have not been able to form businesses, a small but greater percentage than themselves of their fathers had been engaged in some sort of business, mainly retailing. About the same percentage of their mothers has also done so. They were basically marketeers. Business inheritance did not exist. About half of their fathers had attained primary education while a further small percentage had accomplished secondary education. About one in three mother's had no education while one in two had attained primary education. But one in ten had completed secondary school.

It therefore appeared that university students and graduates came from different backgrounds in terms of business ownership, education, working organisations than they were developing themselves. Business inheritance was non existence since there were virtually no businesses to inherit (these were small retail establishments or market stands), owned by their parents.

6.3.3.8 HYPOTHESIS TESTING OF ATTITUDES TOWARDS WORKING IN SMALL FIRMS AND SELF EMPLOYMENT

Empirical evidence showed that students and graduates preferred executive positions in large firms. But there was no evidence to support the hypotheses:

1) That students and graduates had negative attitudes towards working in small businesses.
2) That students and graduates had negative attitudes towards starting their own businesses.

In fact there was overwhelming evidence that students and graduates had positive attitudes towards working in small firms and towards owning businesses. In addition there was no statistical difference between students and graduates in their wishes to work in small businesses or start their own businesses. However more accounting students and graduates preferred to pursue professional accounting qualifications than Business administration students and graduates. The later group appeared to be contented with the first degree and was therefore ready to to into full employment immediately upon graduation.

Therefore the two hypotheses that students and graduates had negative views towards working in small businesses and starting business were rejected. The alternative hypotheses that they were positively disposed were accepted.

Footnote 1.

a) Public sector: This may be defined to include local authority employees manual employees of the government and the employees of the civil service. (Technical paper, No.1 P.17).

b) Public service: This comprises civil service, teaching service, police and prisons, judiciary and district councils (Technical paper, P.11).

c) Parastatal sector (ZINCP): The parastatal sector refers to all companies which fall under ZINCO [Zambia Industrial and Mining Corporation]. Quas-government organisations such as the University of Zambia, National Council for Scientific Research, Tropical Diseases Research Centre etc. are not included under this heading.

d) Private sector: The private sector refers to local and foreign privately owned companies. It employs about 74% of the formal labour force.

CHAPTER 7 : ENTERPRISE AND EMPLOYMENT CREATION AMONG PRACTISING BUSINESSMEN

7.1 INTRODUCTION

One of the most important hypotheses of this study was that the small manufacturing firms do not create significant job opportunities compared to large manufacturing firms. The jobs lost through contractions or closures are not replaced by those created by small firms. The objective derived from the above hypothesis was:

To analyse the performance of the small scale manufacturing sector in creation of employment.

This in turn necessitated:

a) Finding out the rate of new firm formations.

b) Ascertaining the employment creation rates by small compared to large firms.

A second important hypothesis was that a significant proportion of school drop-outs with educational level of grade VII and below will not find self-employment in the formal manufacturing sector. Small business start-ups and success in the manufacturing sector is positively related to such factors as good education of at least grade IX (former secondary school of form II level), working experience and access to financial resources.

In order to prove whether or not the above hypothesis was true an objective was derived to discover the types of people who form small businesses in Zambia:

a) Their personal and family characteristics

b) Situations and reasons that led them to seek self-employment instead of salaried employment.

c) Stages in their life time when they decided to enter self-employment.

A third hypothesis was that small business stimulatory policies were inadequate to encourage potential small businessmen to form more businesses.

To this end, the following objectives were derived to prove the hypothesis by assessing small business stimulatory policies:

a) Government's (i) fiscal and (ii) non-fiscal incentives provided directly or through SIDO.

b) Voluntary / private financial and non financial organisations, and their incentive policies.

A fourth hypothesis was that SIDO's programmes had been concentrated more on assisting existing small businessmen than new business-start ups.

To prove this hypothesis, an objective was set to find out the extent to which SIDO had been encouraging new firm start-ups as opposed to propping up already existing businesses:

a) In urban areas, their numbers and types

b) In rural areas, their numbers and types.

The first and second hypotheses, and objective (a)(i) of the third hypothesis are discussed in this chapter. Part (a)(ii) will be taken up together with objectives (b) in chapter 8.

Fieldwork results showed that most respondent businesses 21% were formed in 1980 by both indigenous Zambians (47%) and foreigners (53%). The majority were private limited business ownership (70%). Most of these were started from scratch (80%) as opposed to purchasing existing ones. The main influencing person in the start up process was the entrepreneur himself or herself (85%). The majority of entrepreneurs were men comprising 91%. The predominant source of financing business start ups was through own savings (83%). Government agency assistance in business start up was virtually non existent as 5 people only (2%) had been assisted. Private agency assistance was equally poor as 2 persons (1%) had been assisted.

As regards the process of becoming an entrepreneur, findings showed that the greatest majority (about 78%) of all business owners were first employed in a salaried job. Only 9% went straight into business ownership after leaving school. Their average working experience before starting their first business was 12 years. However, entrepreneurship appeared to require full time attention as most of them (82%) were no longer engaged in any other salaried employment.

These business starters were middle aged young men and women in their 30s. Their average age when they started the first business was 32 years. They were in their 40s, with an average age of 42 at the time of the interview. Only about 12% were 30 years and below. Most of them were married (88%). Their average business experience since their first business was 8 years.

They were moderately educated, compared to the rest of the Zambian population. Most of them had achieved at least secondary

education (84%). Compared to 10% of the Zambian population and 45% of the Zambian work force who had obtained secondary education. After leaving school, the majority of them (60%) had undertaken some form of trade or training, lasting for an average period of two years.

Parental background did not appear to have influence on indigenous Zambians. Those came from different backgrounds. But most Asian origin entrepreneurs' parents had owned a business.

As regards employment creation, contrary to the hypothesis, small firms created more employment, than large firms over a longer term of ten years than they did in the short to medium term. The difference was statistically significant at 0.04.

7.2 ENTERPRISE FORMATION IN ZAMBIA

7.2.1. TYPES OF BUSINESS FIRMS, FORMS AND TYPES OF BUSINESS OWNERSHIP

The most popular types of businesses were not in primary industry but in Food, drink & tobacco and Clothing & leather goods each accounting for 22%. (The International Standard Industrial Classification - ISIC - was used). The next sector was Chemicals (12%) followed by metal goods 11% (see table 7A.1 for all business organisations). Concentration on entrepreneurs showed that there was no statistical difference between indigenous Zambians and foreigners or between small and large firms (see table 7A.2). A greater percentage of women (69%) compared to men (23%) were involved in clothing and leather goods type of businesses. For example no woman was carrying out a business in the chemical, metal goods, textile or timber / wood

furniture industry. The differences were statistically significant at 0.0001. Size of firm was not an important factor as there was no difference between small and large. Among entrepreneurs, the most common form of business ownership was the private limited company which accounted for 70% while the second was sole proprietorship with 21% (table 7.1).

This finding that the majority of businesses were private limited may be surprising when compared to structures experienced in western countries. There, a greater percentage of them are sole proprietorships. However, the data derived from the office of the Registrar of companies records was compared to entrepreneurs' own responses to a different question which asked them to state the type of ownership of their firms (see questions 2 and 4 of businessmen questionnaire in chapter 11 appendix 3.

One of the probable main explanations of the high proportion of private limited companies is that many were registered as "limited companies" in order to meet some of the basic commercial banks' lending requirements. These hardly lend to individuals, but limited companies as was confirmed by the financial institutions themselves (see chapter 10). This requirement is critical in an economy where wealth inheritance is difficult. Since most businessmen start off with their own capital (section 7.2.3.2), it becomes necessary for them to rely on credit and loans, instead of cash, for their operations. This view was, for example, confirmed by Mzumara, a Lusaka businessman who stated:

> ... DBZ wanted [me to form] a limited company [in order to obtain a loan]. I wasn't interested in a limited company because of unnecessary expenses for example securing lawyers, certificate of incorporation etc..

Table 7.1(a) Distribution of businessmen's most common form of business ownership

BUSINESS FORM OF OWNERSHIP	No.	VALID %
PROPRIETORSHIP	43	19.7
PARTNERSHIP/ CO-OP	18	8.3
PRIVATE LTD CO.	148	67.9
PUBLIC/ PARASTATAL	9	4.1
TOTAL	218	100.0

No. Missing = 0

Table 7.1(b) Distribution of entrepreneur's most common form of business ownership

BUSINESS FORM OF OWNERSHIP	No.	%	VALID %	CUM %
PROPRIETORSHIP	39	17.9	20.6	20.6
PARTNERSHIP/CO-OP	17	7.8	9.0	29.6
PRIVATE LTD CO	133	61.0	70.4	100.0
NOT DOB OWNER	29	13.3	MISSING	
TOTAL	218	100.0	100.0	

No. Missing = 29

More Zambians have been able to become entrepreneurs since independence, when their numbers were negligible, as 47% of the respondent firms were owned by indigenous Zambians while 53% were owned by foreigners (see table 7A.2 referred to above). (An indigenous Zambian entrepreneur was defined as a business owner whom one of the parents was born in Zambia).

7.2.2 FORMATION RATE

It was surprising to discover that only 48% of all the respondents owned one firm . The rest owned at least two, the highest being 15. The average number of firm ownership was two. The third percentile value was 3 firms. Type of ownership was not an important criterion in determining the number of firms in an enterprise. The common belief among Zambians that foreigners own most of the businesses and many of them own several was not supported at least for the manufacturing sector. In fact indigenous Zambians owned 2.5% while foreigners owned 2.1 firms. These differences were however not significant (table 7A.3). The

claim that many Indians own several businesses was not supported either, for the manufacturing sector. In fact the British owned 2.5 followed by Zambians with 2.4 (both naturalised and indigenous) (see table 7A.4). One of the critical factors in determining the number of firms owned by an enterprise was size of firm. On the average, small firms had about 2 while this was 4 for large firms. These differences were significant at 0.0000 (table 7A.5). Another important variable in owning more businesses was education. Entrepreneurs with primary, secondary to college, and university owned 1, 2 and 3 firms respectively. These differences were significant at 0.0040 (table 7A.6). This meant that the more educated the entrepreneur was, the more likely that he would own more firms.

The high rate of firm ownership by one individual may be explained by the need for entrepreneurs to avoid state take-overs if the business became very large, as per 1968 Mulungushi reforms, as Kabati, a Lusaka businessman in Lilanda explained to the researcher:

> Zambian businessmen are not allowed to keep K250, 000 in cash in bank account. [Further] if a business is worth more than K500,000, then state participation is required. [As a result] some businessmen do not even have bank accounts. For example most Indians merely have bank accounts to pay for purchases.

This allegation about not having bank accounts by Indian businessmen were proved true in February, 1988 when results of this study were being analysed. President Kaunda ordered raids on traders suspected of black marketeering. Police confiscated from Asian traders (Times of Zambia, February, 24 1988):

> K2million in Zambian currency...[including] K0.4m found in a dustbin, travellers cheques and Malawian, British, U.S.A. and Ghanaian currency...

Shops were also closed down by the government in various parts of the country, shop keys and passports were impounded. In Kitwe banks reported "unprecedented" rushes to deposit cash. Currency notes were allegedly thrown in toilets. For example (Times of Zambia, March 13, 1988: March 14, 1988):

> Lusaka...residents were chased away by paramilitary police from an overflowing septic tank in the town centre where they were fishing out torn pieces of high value Kwacha notes

which local rumour associated with seizures of currency from shopkeepers suspected of black marketeering. A total of 36 shops were closed by 7th March (Times, March, 5, 1988: March, 7, 1988:). By April 16, 1988, a total of 203 trading licenses had been revoked (Times of Zambia, 16th April, 1988).

Coming back to the formation rate, research findings revealed that over a period of 20 years from 1965 to 1985, the rate of firm formation in five year periods was highest in 1980 when 21% of the respondent firms were formed. This reflected a rate of 2.6 (40 - 11 / 11) or 263% increase over 1972. Smaller decreases of 0.1 (12 - 14 / 14) or -14% were registered for each of the periods in 1970 over 1965 and in 1975 over 1980. There was also a decrease of 1.5 (16 - 40 / 16) or 150% in firm formation in 1985. The greatest annual increase was in 1982 when 14% of the respondent firms were formed (see table 7.2).

Table 7.2 Rate of Firm Formation in different year cohorts over a 20 year period

YEAR OF FORMATION	No. OF FIRMS	%	VALID %	CUM %
1965	14	6.4	7.4	7.4
1970	12	5.5	6.3	13.8
1975	11	5.0	5.8	19.6
1980	40	18.3	21.2	40.7
1981	23	10.6	12.2	52.8
1982	26	11.9	13.8	66.7
1983	24	11.0	12.7	79.4
1984	20	9.2	10.6	89.9
1985	16	7.3	8.5	98.4
1986	3	1.4	1.6	100.0
Not formed	29	13.3	MISSING	
TOTAL	218	100.0	100.0	

No. Missing (Firm not yet operational) 29

Evidence showed that only 37% of all the firms interviewed had started within the same year of registration. About 41% had started after registration and 22% had started before registration. The mean delay period was about one year. There were no significant differences in type of ownership, citizenship or size of firm although the Asian community's delay was the largest at 2 years compared to Zambian's 0.4 years (table 7A.7). Entrepreneurs with no education or primary level had started operating probably on an informal level, a couple of years before registration. But university graduates commenced operations about two years later. ANOVA analysis showed that these differences were significant at 0.0000 (table 7A.8).

Overall analysis of laggards or early starters had cancellation effects which concealed the seriousness of operating before registration or delaying to commence business after registration. Separate analysis revealed that on the whole, some firms operated illegally for a period of close to 4 years. This was true regardless of type of ownership, nationality or size of firm. See for example table 7A.8 for size of firm in the case of entrepreneurs. The less educated an entrepreneur was, the longer he operated illegally before registering his business. F-statistic was significant at 0.0000 (table 7A.10). It also took an average of 4 years after registration in making preparations before beginning operations. Entrepreneurs took shorter (3 years), but there were no differences between nationality, sex, size of firm or education. But on the whole, the less educated started almost sooner (immediately) than the more educated (4 years for university)(table 7A.11). This may point to the differences in complexities of the organisations formed.

Some businessmen blamed these delays in commencing operations on the red-tape in processing applications for obtaining licences. Chilombo, a Ndola businessman complained:

> The firm registered a long time ago. But red tape proved it difficult to obtain manufacturing licence and import licence.

With the methodological problems of non availability of records for deaths of firms, discussed in chapter 5, it was not possible to accurately determine the rate of firm closures. But among the entrepreneurs who could be located, 80% of their firms were still operational, 10% had ceased operating and the other 10% never took off. There were no statistical differences between indigenous Zambians and foreigners although indigenous

Zambians are alleged to often fail to run businesses (table 7A.12). More foreigners were however still operating their businesses than Zambians. (85% against 75%). Again more Zambian businesses had either ceased (14% versus 5%) or had never operated (11% versus 10%). But more females than males had actually started before stopping (18% as against 9%). More males than females had never started at all (11% versus 5%). These results were not statistically significant (table 7.3)

7.2.3 BUSINESS FORMATION PROCESS

7.2.3.1 Reasons for Business Start up and Influencing Person

There was no overwhelming reason for going into business. But the most important were five. The first, indicated by 28% of the respondents was the need for personal achievement and autonomy. Money and security came a poor second with 19%. Surprisingly, helping the country was the third, mentioned by 16%. The fourth, stated by 14% of the respondents was that there was a ready market and the fifth was that they had skills. Females were similar to men in their motivating factors. Zambians were also similar to foreigners in the factors that motivated them as differences were not significant (see table 7A.13).

As was argued in the entrepreneurship theory, in the case of Zambia, the reasons and situations that lead Zambian entrepreneurship into business ownership were also found to vary. One of the reasons indicated by businessmen for wishing to own a business was independence. Kambole, a businessman from Kitwe commented:

> After university, I wanted to become a chief executive in a company (and actually was one). But I decided to work for myself since I already had sufficient training from parastatal companies. I did not want to be answerable to any person.

Commenting on the need for self-actualization, as per Maslow's theory, Nakalinda, a Lusaka businessman said:

> After working for sometime, I got to a point where I wanted to be on my own. I wanted to manufacture components from the scratch. [I wanted to produce] original [items], not something worked on previously by another person. I studied as an apprentice on the railway. I worked there fixing diesel steam engines. I got experience and interest while working in a workshop dismantling engines and repairing them.

A few businessmen indicated some circumstances, supported by the Psycho-dynamic model (social marginality), which forced them to go into business. Kalwiji, from Ndola stated:

> I quit employment because chances of being promoted were limited. I could not go into engineering because there is general tendency to give Zambians inferior positions in favour of expatriates. I was frustrated and quit.

Nzima, a businesswoman from Ndola also narrated her experiences as to why she started her Business:

> I started from the scratch after suffering a lot of hardships. I was laid off by NOP [Refined Oil Products] and I had very little money. I started cooking porridge, combined with little mealie meal and sugar [local brew called Nshewa] in four pots as the salary of the husband could not take us any where. I raised enough to purchase four vans [vehicles].

The most influencing person in the business start up in 65% of the cases was the entrepreneur himself. But fathers were the second significant category mentioned in 15% of the cases. Zambians were not different from foreigners (table 7A.14). Males and females were not different either.

7.2.3.2 Method of Business ownership

The most common method of business ownership among most of the respondents (80%) was starting from the scratch as opposed to purchasing existing ones. Inheritance was negligible as 5 persons only out of 188 business owners interviewed had inherited from their fathers (table 7.4). There were no significant differences between indigenous Zambians and foreign origin businessmen, males and females and the less educated and the more educated. For example 82% with primary education and below compared to 82% with secondary education and above started from the scratch. But more small business owners (83%) than large business owners (68%) started from the scratch. About 6% of the former and 16% of the later purchased existing ones while the proportions for parent company assistance were 3% and 16% respectively. These differences were statistically significant at 0.0075.

Evidence therefore revealed that for most Zambians, the initial stages for most businessmen was "a go it alone" proposition. Chabu, a Lusaka businessman complained:

> Nobody wanted to support me when I started. Small scale businesses [such as] mine [which] manufacture agricultural goods should be given priority and exempted from taxes.... The government should give preference to manufacturing businesses [such as] mine which are very important for this country's development.

Table 7.3 WHETHER FIRM IS STILL OPERATIONAL BY ENTREPRENEUR'S SEX

WHETHER FIRM IS OPERATIONAL	ENTREPRENEUR'S SEX		
	MALE	FEMALE	
	No.	No.	Total
	Row %	Row %	No.
	Col. %	Col. %	Row. %
YES	130	13	143
	89.5	10.5	80.3
	80.5	70.9	
CEASED	14	3	17
	82.4	17.6	9.6
	8.8	15.8	
NEVER OPERATED	17	1	18
	94.4	5.6	10.1
	10.7	5.3	
Column Total No.	159	19	178
Column Total %	89.3	10.7	100.0

$r^2 = 1$ P = 0.3049 Cramer's V = 0.09 No. Missing = 40

Table 7.4 Distribution of most common method of business ownership

METHOD OF BUSINESS OWNERSHIP	No.	%	VALID %
STARTED FROM SCRATCH	131	69.3	80.3
PRIVATE AGENCY ASSISTED	2	.9	1.1
FAMILY INHERITANCE	5	2.3	2.7
PURCHASED EXISTING FIRM	14	6.4	7.4
JOINED EXISTING PARTNER	4	1.8	2.1
PARENT COMPANY / OTHER	10	4.6	5.3
PRIVATE CO., ASSISTED	2	.9	1.1
REFUSED/ NOT ASKED	1	.5	MISSING
NOT OPERATIONAL	29	13.3	MISSING
TOTAL	218	100.0	100.0

No. Missing = 30

7.2.3.3 Start up Capital

The average amount of required capital for start up was out of reach for most small businessmen. The figure (obtained from the office of the Registrar of Companies files) was K725,000. But the median was K102,000. The third quartile value was K330,000. The average reported capital by the respondents themselves was close to official capital since it was 707,000, with a median of K20,000 and a third quartile value of K60,000. The high required capital was due to , a few companies with extremely high capital. One private company had capital of 1 billion Kwacha. Four other registered firms had capital in excess of K10 million In 83% of the cases, this initial capital was raised through own savings. The next significant method was through shareholders or parent companies accounting for 14%.

Excluding the few outliers, evidence revealed that the average required capital (as reported by respondents themselves) for all firms was K138,000, but it was K523,000 for large firms compared to K39,000 for small firms. The F-value was 15 and this was statistically different at 0.0002 (table 7.5). The same conclusion was reached when official average start up capital was examined as it was still high at K386,000 for all firms. comparing large and small firms showed that the average start up capital for the former was K898,000 while it was K231,000 for the latter. The F-statistic was 13 indicating that the two were different. This was significant at 0.0004 (see table 7.6). The indication was that smaller firms needed far much less capital than large firms for start up. But the average amount was still out of reach for most small Zambian entrepreneurs.

Further analysis of the small firm sector showed that although the private Limited company was the most favourable type of business ownership, it was the most demanding in terms of required capital at K303,000. The next category was a partnership with average official capital of K89,000, followed by a proprietorship with K74,000 and lastly the co-operative was the cheapest at K35,000. These differences were however not significant when considered together.

Concentration on differences of average needed capital between indigenous Zambians and foreigners revealed a figure of K129,000 against K260,000 respectively. The F-value was 1.4 and was not significant. When nationality was considered, significant differences existed at 0.0020 with F-value of 4 in required capital as follows: K123,000 for all Zambians including

naturalised; K82,000 for other Africans; K176,000 Asians and K1028,000 for British.

One of the implications was that the required start up capital for the most common and practical type of business form (private Ltd.) and even for proprietorship was very high for most Zambians. But those who managed to start required about the same amount of capital as other nationalities.

In 71% of the cases, this initial capital was raised through own savings. This type of financing was true for both indigenous Zambians and foreign origin entrepreneurs as there was no statistical difference between the two groups (table 7A.15). There was however a statistical difference between small and large firms. More small firms (68%) than large firms (40%) financed their businesses from own savings while less small firms (9%) than large ones (39%) financed through shareholders or parent company. The next important method was through family grant and loan accounting for about 9% only among entrepreneurs. But it was higher than bank financing which was a mere 5%. Government agency assistance was an insignificant method of financing a business as 5 people only or 2% benefited. Private small firm supporting agencies were worse as 2 persons only (1%) reported having financed their businesses in this manner. When asked to indicate the government agency which assisted them, 4 of the 5 mentioned Development Bank of Zambia while 1 indicated Zambia State Insurance Corporation (a parastatal organisation). It should be noted that none of the respondents started a business with the assistance of SIDO.

The type of assistance received by four of the five was equity participation while the remainder got direct financial assistance. The average amount received was K225,500. The two persons who received private agency assistance named SEP as having been the organisation which helped them. One of the two received direct financial assistance while the other had equity participation. One received K1,200 while the other got K3,500.

Table 7.5 Differences in average start up capital between small and large firms as reported by respondent

DESCRIPTION OF SUBPOPULATION

Criterion Variable INITIAL CAPITAL('00s)REPORTED BY RESPONDENT
Broken Down by SIZE OF FIRM USING No.OF EMPLOYEES WHEN OPERATIONAL

SIZE OF FIRM CLASSIFICATION	No.	Mean	Std Dev
For Entire Population	168	1373	8780
SIZE OF FIRM (ESTABLISHMENT): SMALL	134	394	831
SIZE OF FIRM (ENTERPRISE) : LARGE	34	5230	14536

F = 15; P = 0.0002 Total No. 191; No. Missing = 23 or 12%

Table 7.6 Differences in average registered start up capital between small and large firms

DESCRIPTION OF SUBPOPULATION

Criterion Variable INITIAL REGISTERED CAPITAL IN '000s
Broken Down by SIZE OF FIRM USING No.OF EMPLOYEES WHEN OPERATIONAL

SIZE OF FIRM CLASSIFICATION	No.	Mean	Std Dev
For Entire Population	168	366	996
SIZE OF FIRM (ESTABLISHMENT): SMALL	134	231	669
SIZE OF FIRM (ENTERPRISE) : LARGE	34	896	1690

F = 13 P = 0.0004 Total No. 191; No. Missing = 23 or 12%

It is clear that the required start up Capital was very high, out of reach for most potential small business starters. This is a serious constraint since they have to provide it themselves as shown above. This was the same fear that SBIS students and graduates raised in chapter 6.

In personal interviews, many potential and practising businessmen viewed availability of capital as an important factor for business start up. But some emphasised that what was needed was enough capital to start off, not necessarily a lot of money. They said that it was possible to start off with modest capital and succeed. Haambole, a Lusaka businessman, one of those who argued that capital was the key factor said:

> Finance is the critical issue. A reasonable financial background to enable him to meet requirements of lending institutions. Retirement benefits are very little.

But Kanyanta, a Kitwe businessman argued that although some people have presented lack of money for failure to start businesses,

> Starting business does not necessarily require money but it only helps to run it. A lot of people have failed to start businesses due to lack of money. But this is not an excuse because you can start it without money. People have managed to bring a number of things together and are now making money.

Kopa, a Lusaka businessman believed that capital was essential. But he added that only enough was necessary when he said:

> Capital is essential, but you don't need a lot. Start in a humble way with little money and then grow. Do not give up or get discouraged. Someone who starts small will [end up being] very disciplined - not spending too much on social activities. Patience and determination [are the key factors].

Kalabo, a Lusaka businessman with four firms also narrated his humble way of starting his business in order to bring the point home:

> A businessman has unique ambition. He can start with or without funds. Do not rush in it. take time and eventually go into it. You do not need to accumulate money to start. I started with two crates of beer and the bar has now a capacity of 200 crates. You [however] require the working experience to know how difficult it is to get money.,.

7.2.4 Provision of Operational Capital and Loan Facilities

In order to find out the sources of and to measure the frequency of seeking operational financial assistance, the number of successful times and the amounts received, respondents were asked several questions relating to business loan applications. (A business loan was defined as any application for financial assistance including bank overdrafts). They were first asked to indicate if they had had applied for a business loan. Results showed that more operational capital was provided by the entrepreneurs themselves. About 51% had not in fact applied for a business loan. There was no statistical difference between indigenous Zambians and foreigners (table 7A.16). Education did not matter as there was no statistical difference. But among all respondents, more small firms than large firms (54% as against 33%) had not applied for business loans. These differences were statistically significant at 0.0334 (table 7.7).

Those who had not applied were asked whether they would like to apply for one. About 61% (55 cases) said "no". This response was similar between indigenous Zambians and foreigners, more educated and the less educated, and small versus large firms. But more men were cautious about obtaining a loan than females

because 65% and 22% respectively did not want to apply. These differences were statistically significant at 0.0308 (table 7.6).

When those who would not like to apply were further pressed for a reason, 32% mentioned high interest rate as the constraint while a further 14% felt there was no point since they would not qualify. But only 23% had no need since they had "enough". Thus the majority were discouraged for several reasons. Some spelt out in entrepreneurs' qualitative statements.

By sex

Table 7.7 WHETHER ENTREPRENEUR HAS APPLIED FOR A BUSINESS LOAN BY SIZE OF FIRM BASED ON NO. OF EMPLOYEES PER ENTERPRISE WHEN OPERATIONAL

WHETHER APPLIED FOR LOAN	SIZE OF FIRM: SMALL	LARGE	Total
	No. Row % Col. %	No. Row % Col. %	No. Row %
1 NO	78 88.7 54.2	13 14.3 33.3	91 49.7
2 YES	66 71.7 45.8	26 28.3 66.7	92 50.3
Column Total No.	144	39	183
Column Total %	78.7	21.3	100.0

χ^2 = 3, P = 0.0334, Phi = 0.17, No. Missing = 33

Table 7.8 WHETHER ENTREPRENEUR WOULD LIKE TO APPLY FOR BUS LOAN BY ENTREPRENEUR'S SEX

WHETHER WOULD LIKE TO APPLY FOR LOAN	ENTREPRENEUR'S SEX: MALE	FEMALE	Total
	No. Row % Col. %	No. Row % Col. %	No. Row %
1 NO	55 96.4 63.4	2 3.6 22.2	56 61.1
2 YES	28 80.0 34.6	7 20.0 77.8	35 38.9
Column Total No.	81	9	90
Column Total %	90.0	10.0	100.0

χ^2 = 3, P = 0.0306, Phi = 0.27, No. Missing = 128

Discrimination against non-Zambians: Among those who did not bother applying for a loan or an overdraft were non-Zambians. Some of these had applied but they claimed that it was difficult to obtain one since they were non-Zambians. Ndebele, a Ndola businessman claimed "banks discriminate against non-Zambians". Nzunara, a British cypriot also complained of DBZ's bureaucracy and discrimination against non-Zambians in granting of loans. His firm registered in 1984, but was not yet operational although he had obtained a manufacturing license because

> ... I had applied for a loan from DBZ through SEP but could not be approved. This was because there are two firms [producing the same product], Moore Pottery and Zambia Ceramics and that I was not a Zambian. Yet my firm was to produce decorative ceramics rather than functional.

High interest rate: Other businessmen, like Mwale of Lusaka, deplored the yawning financing gap for small businessmen in Zambia when he observed:

> most firms or prospective businessmen have failed because the government can't give financial support. Banks have set high interest rates which the small firms cannot afford.

Mwiinga, a Lusaka businessman also complained of problems of bank financing for small firms when he narrated his experiences, in his letter to the researcher, accepting the interview:

> As a small scale industries sector, we are heavily deprived of loans or overdrafts from lending institutions due to lack of tangible assets or cash security. This business was established in late 1981. We have tried to secure a loan from SEP through SIDO but all in vain. Feasibility studies have since been completed and technical reports compiled. I even went to the extent of using a personal life policy to secure a loan from bankers for this venture but all in vain. I only managed to subsidise [the venture] with personal savings and selling my two vehicles.

Some businessmen deplored discriminatory tendencies by banks against small firms when granting loans and their failure to visit the business when determining viability of the project.

Nzima, a Ndola businesswoman complained:

> Banks are being discriminatory [in favour of] large firms with a lot of money compared to the small firms. What the banks should do is to study what a person is doing and the criteria being the determination of the person [on the likelihood of] continuation of the business and scrutinising his character.

These kinds of views and experiences therefore explain why more small businessmen did not bother applying for loans, as seen in table 7.7, since they did not see any prospect of being successful. Small businessmen however wanted to apply for loans given a chance as seen above. The differences between small and large were not statistically different (see table 7A.17 in the appendix to chapter 7).

Name of Organisation applied to: The finding that both small and large firms were similar in their wishes for loan facilities was further confirmed by a different question which requested those who had applied for a loan to specify the organisation they had applied to. Results showed that out of the 49% (66 cases) who had applied, the majority of 71% had applied to a bank while 10% had applied to DBZ, 9% to SIDO and 6% to SEP. More entrepreneurs of foreign origin had applied to a bank (83%) than indigenous Zambians (60%) while more indigenous Zambians had applied to SEP (10% versus 3%) and SIDO (15% versus 3%). But the differences were not statistically different. This was also true for small versus large firms (see for example table 7A.18). This reflected that the main likely source of financing for both small and large firms was still perceived to be the bank. However, more entrepreneurs with primary or no education perceived other sources as potential financiers than those with secondary education and above (table 7A.19).

About 34% of the 86 who had applied had never been successful while 37% had been successful once only. Those who had been able to get loans twice or more were about 30%. The mean of the amount received the first time they were successful was about K177,000 (table 7A.22) while the median was K50,000. The amount they had got on the second occasion was higher, the average having been about K298,000 while the median was K100,000.

The allegation that foreigners were discriminated against in favour of Zambians was not supported by evidence in this study. ANOVA analysis showed that the average success times were 1.5 for those who had applied. But indigenous Zambians had been successful 1.1 times in obtaining a loan compared to 2 times 8 for foreign origin (table 7A.20). Breaking down the two main groups into subcomponents in fact showed that it was the British who were better off than the rest since the average mean number of times were 5. The between-groups variance was statistically significant at 0.0113 (table 7A.21). But Zambians had been more successful than Asians and other Africans. In terms of first time amount of loans received, there were again no statistical differences between indigenous Zambians and others. But differences existed among various nationalities. Zambians (both indigenous and naturalised) were the largest group who had been successful in obtaining first time loan. But the mean amount was the lowest among distinct groupings (K120,000 against K800,000 for other Africans, as against K500,000 for the British and against K256,000 for the Asian community). These differences were statistically significant at 0.0083, with F-value of 4 (table 7A.22).

The complaint that small firms were discriminated against in obtaining finance was supported by evidence. The chances of being successful were 1 to 3 in favour of the large firms. ANOVA's F-statistic was significant at 0.0058 (table 7A.23). It was also true that small firms received less amount than large firms K129,000 * against K275,000. But F-statistic showed that the between-column variance was not statistically significant at 0.08 (table 7A.24).

Level of education did not appear to have any influence on the number of successful times or the amount of loan received as these were not significant.

7.3 [redacted]

7.3.1 [redacted]

PERSONAL CHARACTERISTICS

The myth that grade VII school dropouts would easily find self-employment after leaving school was scarcely born out. This was so because the process of becoming an entrepreneur was not as easy as the Government has portrayed. (Entrepreneur in this section is used in its strictest sense: who organises, manages and assumes the risks of a business or enterprise (Gray, 1987: 13) i.e. referring only to those who owned businesses, (excluding employee managed organisations). Most respondents were well educated, the majority having achieved at least secondary education. Most did not own businesses immediately after leaving school. They had first to work for as long as 12 years on the average. This afforded them the opportunity to gain industrial experience and accumulate capital, they explained. As seen above, financing business start up was a go it alone process. By the time they started businesses, most of them were in their 30s. Entrepreneurship was a male dominated activity as these comprised the majority of 91%.

7.3.1.1 General Requirements For Business Start up

Respondents stated similar requirements for or their experiences in business start up in the Zambian environment. Kabinga's list was however the most comprehensive and representative. He listed the qualities for becoming an entrepreneur and requirements for business start up as:

a) Management and knowledge of Accounts to know how much you spend;

b) Minimum education level of form III to be able to understand business intricacies;

c) Adequate capital depending on the type of business. Problems arise relating to non-start ups due to lack of capital. Registration fees are K12,6000 (previously K4,000) excluding lawyers fees. For a small businessman, you definitely need a lot of money;

d) Ability to meet debits in order to stay in business. If you can't meet [your obligations] go back to them and give them even a 1/4 and explain to them, then make fresh arrangements;

e) Personality - to know other directors in other companies in order to get credits;

f) Popularity in the public by joining clubs;

g) [Public relations] - donate to charitable organisations to be known.

Ndeke, a former army officer stated a few requirements. One of the basic requirements was that:

> Somebody must have the know-how about the business he wants to go into. This knowledge can be acquired by going to high institutions of learning. He must also have leadership qualities in order for him to direct, plan and co-ordinate his activities. He must also have knowledge about management skills as you will be required to do accounting, personnel management and carry out your own feasibility studies.

Kasoka, an indigenous Zambian graduate started the first business at the age of 26 and was 41 years at the time of the interview. He had 15 firms employing a total of 2,501 people. He believed that strong motivation, the will and conviction to succeed were the basics for business start up:

I took a view [while at] the university that I didn't want to work for anybody after sometime.

All the blacks in business have no history of money. So it is possible to start a business without money. I mean you can borrow. Large amounts are not necessary. The requisite [is] only an educational insight and managerial capabilities [in addition to the] three basic needs for a businessman:

a) Conviction that you want to be in business;
b) Must have drive and push to succeed;
c) Must have the ability to connect the three... factors of production [which are] land, labour and capital.

Other qualities mentioned by various businessmen were:

a) Self-discipline and hard work. Sometimes to be prepared to work 24 hours a day;

b) Be prepared to work in dirt;

c) Self-honesty. If he misuses money, should return it.

d) Innovative in realising the changing circumstances and change with times;

e) Self-drive/motivation and not to rely on other people;

f) Not being too greedy;

g) Ability to carry out feasibility study through inquiries about cost of materials, machines, labour etc.

7.3.1.2. Educational Level and Training

Findings revealed that the majority of entrepreneurs (85%) had achieved at least secondary education. Only 14% with primary education and 1% with no education had managed to become entrepreneurs. In fact 15% had accomplished College education while a good percentage of 27% had achieved University education. The need for good education was true for small business owners as 81% of them had secondary level or above (table 7A.25). This finding was also true for indigenous Zambians as well. About 78% of them had achieved secondary education and above (table 7.9(a)).

This compared very favourably against the rest of the Zambian population. It was seen in chapter 6 that a total of 84% of Zambians had no schooling or only primary school. Only 9.8% of the population had junior to senior secondary school level of education and only 0.2% had a college or university level of education (CSO, 1980: vol II, table 6.1.175).

When compared to the Zambian working population, indigenous Zambian entrepreneurs were still very highly educated. About 45% of Zambian employees had obtained secondary school and higher (table 7.10). Indigenous Zambian entrepreneurs were however less educated than those of foreign origin as table 7.9(a) already referred to shows. For example 78% and 91% of indigenous Zambians and foreign origin entrepreneurs respectively had achieved secondary education and above. This was statistically significant at 0.0109 (table 7.9(a)). Comparing all entrepreneurs to other company chief executives within this study, showed that the former were less educated. About 42% of entrepreneurs had college and university education while the proportion was 87% for company chief executives (table 7.9 (b)). The differences were statistically significant at 0.0002.

About half of all the respondents (48%) had no major while 45% majored in a particular field when they completed school or graduated. Of these the most important were: engineering accounting for 24%, management and marketing 22%, accountancy 11%, economics 10% and technical courses 8%.

After leaving school, 3 out of 5 (60%) had taken some form of trade or training. There was no statistical difference between business owners and company executives (table 7A.26). The

average number of years spent on training was 3. But about 88% had taken up to 4 years of training. Analysis of differences of means revealed that the average number of years of training was 2 years for indigenous Zambians and 3 years for foreigners. This was statistically different at 0.0187 F-statistic. Women had equal period of training as men. The five most preferred trade undertaken were: a) Business studies 24%; b) Technical training (20%); c) Accountancy or bookkeeping 13%; d) engineering (13%) and e) medical (12%). There were no statistical differences between entrepreneurs and company chief executives, meaning that both probably came from similar backgrounds.

Table 7.9(a) ENTREPRENEUR'S MAIN EDUCATIONAL LEVEL BY ENTREPRENEUR'S ORIGIN

EDUCATIONAL LEVEL	ENTREPRENEUR'S ORIGIN		
	INDIGEN ZAMBIAN	FOREIGN ORIGIN	
	No.	No.	Total
	Row %	Row %	No.
	Col. %	Col. %	Row. %
NONE / PRIMARY	18	8	26
	69.2	30.8	14.9
	21.7	8.7	
SECONDARY	40	36	76
	52.6	47.4	43.4
	48.2	39.1	
COLLEGE	10	16	26
	38.5	61.5	14.9
	12.0	17.4	
UNIVERSITY	15	32	47
	31.9	68.1	26.9
	18.1	34.8	
Column Total No.	83	92	175
Column Total %	47.4	52.6	100.0

χ^2 = 11; P = 0.0109; Cramer's V = 0.25; No. Missing = 43

Table 7.9(b) BUSINESSMAN'S EDUCATIONAL LEVEL BY RESPONDENT'S STATUS IN THE FIRM

EDUCATIONAL LEVEL	RESPONDENT'S STATUS		
	BUSINESS OWNER	CHIEF EXECUTIVE	
	No.	No.	Total
	Row %	Row %	No.
	Col. %	Col. %	Row. %
NONE / PRIMARY	26	1	27
	96.3	3.7	13.6
	14.9	4.3	
SECONDARY	76	2	78
	97.4	2.6	39.4
	43.4	8.7	
COLLEGE	26	4	30
	86.7	13.3	15.2
	14.9	17.4	
UNIVERSITY	47	16	63
	74.6	25.4	31.8
	26.9	69.6	
Column Total No.	175	23	198
Column Total %	88.4	11.6	100.0

χ^2 = 20; P = 0.0002; Cramer's V = 0.31; No. Missing = 20

Table 7.10: Employees by Highest Level of Education Attained and Nationality, 1983

Educational level	Zambian		Expatriate	
None	58,415	23	-	-
Primary school cert.	78,786	31	-	-
Form II/III cert.	61,626	25	-	-
GCE 'O' Level	32,801	13	1,239	31
GCE 'A' Level	1,667	1	205	3
Non-university prof.ed.	11,050	4	1,217	20
Bachelor degree	2,831	1	1,858	31
Postgrad. degree	2,162	1	1,450	24
Not stated	2,696	1	66	1
Total	252,134	100	6,033	100

Source: United Nations Development Programme, table 4, p.8.. New York; original source: 1983 Manpower Survey of Employees, Table 8.0 and 10.7. Lusaka: CSO 1985.

TZ: Total Zambian; TNZ: Total non-Zambian.

Statistical evidence and conclusion from those who commented on education was that basic minimum education of junior secondary school was what was needed. Higher education was seen by some as being helpful though it was not essential.

For instance, Kopa a Lusaka businessman with form V education owning 4 firms who advised potential businessmen to start in a humble but disciplined way in their financial requirements observed:

> University education would be helpful in becoming a businessman. It is easier to understand. But it doesn't mean that a grade VII has no chance. What is important is to have rudimentary education. Basically what is essential is arithmetic for accounting purposes.

But, Kalabo, a Lusaka businessman who started his first business with two crates of beer but had 4 firms added:

> Qualities include basic education, up to form III or form V. Grade VII drop outs is not feasible. Conditions are different now [for one with no exposure to start business] unless his father slowly groom him.

7.3.1.3. First Activity Before Becoming a Businessman

Research findings also unfolded the chances of becoming an entrepreneur immediately after leaving school. These disclosed that the majority of entrepreneurs (78%) sought paid employment as the first activity after leaving school. Only 9% went into self-employment before or soon after completing school or graduating. Another 2% started with a family business. Upon further analysis, it was in fact discovered that all of the 18 were foreigners, most of them of Asian origin. It was shown in chapter 6 that the majority of indigenous Zambians (83%) started with salaried employment. But this was 74% in the case of foreigners (table 7A.27(a)). The same results were true for small owners (table 7A.27(b)). Out of those who started business as the first thing, 12 had received assistance in one form or another from parents who were businessmen themselves.

7.3.1.4. Working Experience and Types of Organisations

Further investigations showed that entrepreneurs worked for many years, an average of 12 years before starting their first businesses. There were no statistical differences between indigenous Zambians and foreigners, and women and men. Kalenga, an indigenous Zambian graduate, Lusaka businessman, narrated his 12 year working experience as:

> I worked in Anglo American Rhokana Division, Personnel department. I left and joined Cocacola company as a sales manager. I rose to departmental manager and left the company when I had reached [the position of] deputy manager. I left and joined politics and participated in the youth organisation...

By the time they were ready to start their businesses, they were already in their 30s. Their average age was 33 years. This was true for both small small business owners as well as indigenous Zambians and foreign origin entrepreneurs as differences were not significant.

Size of firm was not important as only about 7% (10 out of 152) were below 20 years when they started their first business (table 7A.28(a)). The average age was 34 compared to 29 for small business and large business owners, respectively when they started their first business. This was not statistically significant at 0.056 level.

There was also no statistical significance between indigenous Zambians and foreigners in terms of the high age requirement.' There were only twelve exceptions accounting for about 7% of the total, who had started their first businesses at an early age of below 20 (table 7A.28(b), two of them at 12 and 14 years, the rest were between 16 and 19 years. These had in fact owned businesses before they completed school. But detailed analysis revealed that all of them were of Asian origin. In addition, all of their parents, except one, had businesses ranging from retail, to wholesale and manufacturing.

But in general the tendency to own business at an earlier age by children whose parents had businesses was found to be statistically significant at 0.0058. For example, entrepreneurs whose fathers had owned businesses started at an earlier age of 31 compared to 35 for those whose fathers had no business. had not respectively. The F-statistic was significant at 0.0058 (table 7A.35(c)), see next section on parental characteristics.

The average entrepreneur was in his 40s, an average of 42 years, at the time of the interview. Only 12% (22 out of 178 with valid data) were 30 years and below regardless of size of firm (table 7A.29(a)) or Zambians versus foreigners (see table 7A.29(b)). The differences were not significant.

The implication of these results were that business formation required mature people, not youth aged 14 years and below of the grade VII drop outs. The majority (about 88%) were leading family lives, having been married for an average period of 19 years, with a median of 18 and a mode of 10 years. More women entrepreneurs preferred to remain independent than men as the proportions of those who were married were 83% and 92% respectively. The results were statistically significant at 0.0000 (table 7A.30). Entrepreneurs average business experience was 9 years, with a mode of 6 years. Entrepreneurship was a full time activity as 83% were not engaged in salaried employment. This was true regardless of the level of education, sex or indigenous versus foreigners.

The entrepreneurs' basic types of organisations in which they had worked in most of their times before owning businesses were medium to large (36%), government (20%), parastatal organisations (18%) and small private (15%). More indigenous Zambian entrepreneurs came from government and parastatal organisations (55%) than foreign origin entrepreneurs whose background was the private sector (62%) compared to the public sector (22%). These differences were statistically significant at 0.0006 (table 7A.31). The majority had occupied supervisory, middle management or senior management positions (45%) before

becoming self-employed. The next important category was those who had occupied unskilled, semiskilled, or skilled positions (26%), followed by clerical (15%) and own business 8%. There were no significant differences between indigenous and foreign origin entrepreneurs.

Their first businesses they started were not necessarily related to the industry they worked in for most of their time in 65% of the cases. Thus only 35% were related.

The trait theory of being a first born to have greater chances of becoming an entrepreneur was not supported by findings of this study, in the Zambian environment. Only 32% of the businesses were formed by first born children. The majority of 60% of the businesses were formed by second, third, fourth and even 5th born or higher. However, first born was the largest category as the next group was 3rd born accounting for 20% of the businesses.

7.3.1.5 Entrepreneurship and Parental background

Results indicated that on the whole there was no relationship among Zambian indigenous entrepreneurs' working experience or becoming entrepreneurs on one hand and their parents' background on the other. But there was some relationship among Asian entrepreneurs and some of their parental personal characteristics.

In 80% of the cases, the entrepreneurs' main jobs before owning a business were not in the same industry as their fathers. In 60% of the cases, their fathers' education was primary level

or lower. Only 15% had achieved college or university education. As for their mothers, the differences were even greater as 78% of their mothers had no education or had completed up to primary level only. Only 6% had accomplished college or university. Entrepreneurs did not however come from different parental educational backgrounds when compared to those of company chief executives' parents (table 7A.32). Entrepreneurs' parents were better educated than the rest of Zambia's society but were similar to the workforce since 40% of the former and 45% of the later had achieved at least secondary education. But their children were statistically significantly better educated at 0.0003. For example, 87% of the entrepreneurs had completed secondary school against their fathers' proportion of 40% (table 7A.33).

As regards the basic organisation in which fathers had worked, there was no overwhelming category. But the largest category was business owners with 27%. The next one was the public sector with 26%. But indigenous Zambians' fathers differed from foreign origin parents (table 7A.34(a)). Entrepreneurs fathers basic occupations were businessman 26%; unskilled, semi-skilled or skilled 19%, farming 17% and civil service (16%). But as in the case of organisations, indigenous entrepreneurs' occupations differed from those of foreign origin (table 7A.34(b)). The majority of their mothers had no occupation (78%) or were engaged in farming (5%).

Zambians came from different parental background in business ownership. Asked whether their fathers had owned businesses, 46% of all respondents said yes. A small proportion of their mothers

had owned a business (13%). Entrepreneurs were not different from company chief executives in this respect (table 7A.35(a)). However a smaller proportion of 30% of fathers of indigenous Zambians compared to 64% of foreign origin owned a business. This was statistically significant at 0.0000 (table 7A.35(b). Most of the fathers who had owned business were of Asian origin 72% followed by other African countries (65%) British (57%) and then Zambians (26%) (table 7.11). As stated earlier, entrepreneurs whose parents had owned businesses started their own businesses at an earlier age of 31 compared to 35 for those whose parents had not (table 7A.35(c). The main types of businesses were retail (53%). As regards their mothers, a very small proportion of 12% had owned businesses while 88% had not. Retail and tailoring were the most common types.

TABLE 7.11 WHETHER ENTREPRENEUR'S FATHER OWNS A BUSINESS BY ENTREPRENEUR'S BASIC PLACE OF BIRTH

WHETHER ENTREPRENEUR'S FATHER OWNS A BUSINESS	ENTREPRENEUR'S BASIC PLACE OF BIRTH				
	ZAMBIA	OTHER AFRICAN COUNTRIES	INDIA / PAKISTAN SRILANKA	EUROPE / AMERICA	
	No. Row % Col. %	No. Row % Col. %	No. Row % Col.%	No. Row % Col.%	Total No. Row. %
YES	46 55.4 42.6	13 15.7 61.9	13 15.7 54.2	11 13.3 52.4	83 47.7
NO	62 68.1 57.4	8 8.8 38.1	11 12.1 45.8	10 11.0 47.6	91 52.3
Column Total No.	108	21	24	21	174
Column Total %	62.1	12.1	13.8	12.1	100.0

X^2 = 3; P = 0.3320; Cramer's V = 0.14; No. Missing = 44

7.3.2 Domination of Business Ownership By Foreigners

The old pattern of foreign domination in business ownership, particularly by the Asian community, appeared to be changing at least in the manufacturing sector for firms formed in the years covered by the study. A large proportion of 47% of the firms were formed by indigenous Zambians or with foreign partners (table 7A.36). (An indigenous Zambian was defined as one where one of the parents was a Zambian). About an equal proportion of 47% of fathers and mothers were born in Zambia. The next highest group was India, Pakistan and Srilanka, accounting for 26% (table 7A.37).

The percentages of Zambian owned businesses increased to 62% when the birth place of the entrepreneur himself was considered. Thus about 15% of the non indigenous Zambian entrepreneurs were born in Zambia. Only 14% were born in India, Pakistan or Srilanka while 12% were born in other African countries and another 12% were born in Europe (see table 7A.36). When citizenship criteria alone was considered, the proportion of Zambians owning businesses was even higher accounting for 71%. Those of Asian citizenship dropped greatly to 9% and other African countries to 3%. Those who were British were 11% (including some of the Asians) and other European countries were 4%.

These findings would tend to show that more entrepreneurs born of Asian origin parents have actually lived in the country for long periods of time. In fact 39% of all entrepreneurs' fathers and mothers of foreign origin had lived in Zambia for most of their time. But 16% had lived in Asia most of the time (table 7A.36). The average number of years of living in Zambia

was 20 for fathers and mothers. About 48% of entrepreneurs' fathers of foreign origin and 50% of their mothers who were still alive, were living in Zambia. The percentages for father and mothers respectively for other areas were: 20% in India, Srilanka or Pakistan; 20% and 21% other western countries; 10% and 9% other African countries.

7.4 SUMMARY OF FINDINGS ON ENTREPRENEURSHIP

1) Rate of Firm Formation. It has been shown that the rate of firm formation was highest in 1980 when it was 2.6. There were decreases in 1970 and 1975 of about 0.1. There was a sharper decline in 1985 over 1980 when it was -1.5.

2) Type of Businessmen. The most common types of business formation were in the food, drink & tobacco, and clothing & leather goods.

3) Form of Business Ownership. The most popular form of business ownership among the respondent businessmen was the private limited company.

4) Reasons For Going into Business. The first reason for becoming an entrepreneur was personal achievement and autonomy.

5) Raising of Capital for Business Start Up. The most common method of business ownership was starting from the scratch. The amount of capital required was substantial, being at least an average of about K388,000. But small firms needed an average registered capital K231,000 only. But this is by no means little money. Entrepreneurs themselves provided

the required amount in most of the cases. SIDO provided no support. But Development Bank of Zambia's small business section had helped 4 people directly or through SEP. SEP, a private agency, established at about the same time as SIDO, had helped only 2 persons.

6) Provision of operational Capital As regards the operational capital about half of the respondents had provided their own. They had in fact not even applied for any loan. High interest rate was the main constraint. But some also indicated that they had enough. Bank financing still remained the main source of operational capital. But most had been successful only once. Thus over 20% of all the respondents in the study had received bank finance at least once.

7) Entrepreneurial Requirements. The road to becoming an entrepreneur was not a rosy one. It required good education of at least secondary educational level, some training of at least two years, working experience first of about 12 years before starting a business. The majority of respondents had worked in medium to large businesses. Some had held positions of high responsibility. Most entrepreneurs did not necessarily start their business in industries they worked in for most of their time.

8) Personal and Parental Characteristics. Being a first born was not a guarantee to becoming an entrepreneur, nor did it have an advantage in the Zambian environment. But age played a part as most people were 32 years old on the average when they started their businesses. This length of time was

explained by the need to work for about 12 years after completing school or graduating to accumulate capital and gain experience. The few exceptions were entrepreneurs of Asian origin who started their own businesses with their parental assistance or worked in the family businesses while very young. Close to half of the entrepreneur's fathers' had owned a business, most of them of Asian origin. The chances of becoming an entrepreneur immediately after leaving school for a typical indigenous Zambian were therefore very slim.

Most entrepreneurs came from different backgrounds from theirs parents who were less educated particularly the mothers. Fathers had basic occupation but most mothers had none.

9) Foreign Domination in Business ownership. The typical outcry by most of the general public that business ownership was dominated by foreigners was not supported by results of the study for periods of interest. Nearly half of entrepreneurs were indigenous Zambians. Further, about three quarters of them were born in Zambia or were Zambian citizens. Most of their parents had in fact lived in Zambia for most of their time and others were still living there. It was however, found to be true that the most major group after indigenous Zambians were the Asian community.

7.5 EMPERICAL DERIVATION OF A SMALL FIRM DEFINITION AND EMPLOYMENT CREATION

One of the key concerns of the study was to find out whether small firms create more employment than large ones. Most respondent manufacturing businesses were indeed small, comprising 78% of the total firms interviewed. Some firms were excluded from this section for missing data on employment levels or if they were not operational.

The first problem was therefore to solve the issue of what a small firm was before analysis of job creation.

7.5.1 DETERMINATION OF SIZE

Small business definition was an issue for investigation in this study. It was hypothesized that SIDO'S definition, based on capital, was inappropriate for this study or for use in Zambia. In addition, it was argued that none of the small firm definitions available at the time of the study was suitable for use in the study or for adapting in Zambia.

7.5.1.1 Inappropriateness of Use of Capital

The main arguments, presented in chapter 1 appendix 2, against the use of capital as a measure for the size of a firm were that it was impractical due to the inflationary nature of Zambia's economy and the consequent delays in enacting those changes since SIDO's definition is a legal one.

In the case of this study, using this measure would have demanded deflating capital investments for each of the firms formed in 1965, 1970, 1975, 1980, 1981 to 1982 in real terms to bring them to the same common denominator. The second stage would then have been to take into account inflationary levels since the definition of K250,000 was set in 1982 for each of the firms from 1983 to 1985 before selecting small firms for analysis. This would have complicated the process. As stated earlier, SIDO itself was no longer using the limit of K250,000 but a limit of K350,000, as an administrative measure as of 1985 since the former proved useless. This was barely two years after enacting the definition. The definition of K250,000 had not been formerly revised by the time of this study. By December, 1988 United Nations Development Programme reported that consideration was being given to revise the ceiling to K500,000 (UNDP, 1987: 73). It was also shown above that the average start up capital was very large for most firms even without taking inflationary effects into account. One may therefore question the need for such a definition if it can not be used.

7.5.1.2. Number of Firms Within an Enterprise

The criteria of a limited number of firms with the same ownership or number of establishments within the same enterprise was found unsuitable in the Zambian situation for two major reasons. (An enterprise in this section refers to the total number of firms within a holding group of companies belonging to the same owners. An establishment is a firm which forms part of an enterprise).

The first reason why the number of firms a person owned was found inappropriate was that there were cases where a person had several firms, thus qualifying to be categorised as a large firm firm owner. But the total number of employees within the group were few. As an illustration, one respondent establishment had 8 employees. But there were 8 firms within an enterprise with a combined total of 75 employees, an average of 12 employees per firm. In two other cases, two establishments had 12 and 4 employees when they became operational. Each of these was part of an enterprise with 4 firms each. But the total number of employees per enterprise were 12 and 16 only. The most striking example was an establishment with 1 employee when it became operational. It was one of the 4 firms within an enterprise. Yet the total number of employees among the four firms was only 15, an average of 4 employees per firm.

The second reason was that the problem of several firms within an enterprise was compounded by the government regulation referred to above which directs that an enterprise worth K500,000 or more should invite state participation in shareholding. This encourages entrepreneurs to form many small businesses as seen in section 7.2.2. As an example two enterprises had 9 firms each. Yet total employment in all firms belonging to each of the two enterprises in 1985 was only 100 and 400 respectively. It has also been shown above that 52% of all the respondents owned at least two firms, which was the average number of firms per businessman.

It would therefore certainly be wrong to classify firms within an enterprise with few employees as large ones merely because the number of firms within a group were several. The criteria of number of firms 'per se' was therefore rejected. The crucial factor to qualify for a small firm, therefore, appeared to be that when these small establishments were put together, they should not form a large enterprise.

7.5.1.3. Small Firm Forming Part of a Large Enterprise

It was therefore found to be a requirement that a small firm should not belong to an enterprise, which when considered in its totality would be regarded as a large firm. The reasons were:

a) These small firms enjoyed certain benefits which the real small firms did not have. These could be management, capital, accessibility to markets and advertising, to mention a few (see chapter 1, appendices 1 and 2 and chapter 2 appendix 2 (see particularly the section on survival of small firms)

b) Their inclusion would have led to wrong conclusions about the numbers of small firms and the level of employment they created.

c) If such a definition was used for qualifying for "small business State benefits", large firms would be eligible, thus depriving the real small firms which desperately need such assistance.

Results from the study showed that when one criteria of employment only was used, with a cut off point of 50, 92% (168

firms) were categorised as small while 8% (15 firms) were classified as large ones among 183 firms, with valid data for initial employment when the firm started operating (see table 7.12). A total of 35 firms were excluded from this analysis because 28 of them were not operational and 6 had missing data.

This however concealed the fact that some of the firms categorised as small were not small. Some of them belonged to conglomerates with many firms and with huge total employees in all firms. As an illustration, one firm had 6 employees when it became operational, thus qualifying for a small firm (using any common cut off point). But had 3 firms with a total of 130 employees in all firms within the enterprise. In another case, a firm had 40 employees but was one of the 9 firms with a grand total of 400 employees in all firms within the group. A striking example was a firm with 40 employees, thus qualifying for a small firm. Yet there were 9 firms within the group with a total employment of 1,200! The most convincing case was a firm with 9 employees and one manager. Yet there were 15 firms within the group accounting for a total employment level of 2,501. It is indisputable that it would be illogical to include such firms into the small category.

A total of 24 firms were excluded from the large size category when this method of employment within a firm only was relied upon. This meant that large size category was understated by about 1.6 times (160%) (see table 7.12). It gives a crosstabulation of size based on less than 50 employees in an establishment and employment in an enterprise. The basic finding would not change materially whether the cut off point was set at 100 or even 200 employees for a small firm. It would therefore be

wrong to classify such firms as small simply because the employees in the respondent firms were below a cut off point. They were different from the really small firms. They enjoyed different benefits from small firms with one enterprise ownership. Suggestions, by some writers, of accounting for inflation in the definition using capital (such as SIDO's), would certainly not have rectified this anomaly. Therefore, when calculating the creation or loss of employment, some which would have been attributed to small firms would legitimately belong to large firms.

In addition to the demand set above that a particular number of small firm should not necessarily form a large enterprise is the requirement that a small firm should not be part of a large enterprise. The crucial issue therefore in resolving this problem was how big an enterprise had to be before classifying it as a large firm. This is now taken up in the next section.

7.5.1.4 The Criterion of Size of Management

In chapter 1 appendix 2, it was shown that size of management has been found to be the critical factor in determining the size of a firm. Empirical evidence also revealed conclusions of other studies that the average number of managers per small firm was 3.

This study also found that the average number of managers when a firm got a manufacturing licence was 2, with a median of 2. But 87% of all firms, with valid data, had 3 managers or less (table 7A.39). When the number of managers at the time of the

study was considered, the overall result for the average number of managers was 2.8 or 3 while the median remained at 2 (table 7A.40). (A manager in this study was defined as any person who is in charge of a group of others). When top management was considered, the results were even more conclusive that most of the firms in the study were small ones. (Top management in this study referred to the number of managers who were reporting to the owner or chief executive officer). A very high rate of 87% of all firms had a maximum of 2 managers while 96% of all firms had a maximum of 3 managers. Analysis of one tier management showed that the average number of managers reporting to owner or chief executive officer was 1.4 with a median of 1 (table 7A.42).

When the out off point for a small firm, was set at 50 employees, top management when the firm obtained a manufacturing licence remained at 2. The number of managers responsible to owner was still 1. But the average number of present managers for the entire population was 2.8 . But mean number of managers for small firms dropped to 2.4 (see table 7A.41) and the median was also 2. As for the firms, over 50 employees, the average number of present managers increased to 4.3 (table 7A.41) while the median increased to 3.

These results tended to support the view that an average small firm has a maximum of three managers. Size of management was therefore found to be an important criterion in arriving at a small firm definition. Size of management is related to the concept of the management span of control (discussed in 1A.4.1.3). Management writers have shown that the average span of control for a manager was 15 employees.

7.5.2 A SMALL FIRM DEFINED

It has been demonstrated that a small firm should not form part of a larger organisation. It has also been verified in this study and other studies that an average small firm should have 3 managers. Other studies have also established that the average span of management was 15 employees. It follows that a small firm should have a maximum of 45 employees (3 managers X 15 employees) or roughly 50 employees.

In the light of the arguments presented in chapter 1 appendices 1 and 2 and the evidence above, on small firm definitions, a small firm was therefore defined as:

> A commercial organisation with not more than 50 workforce including owners, family members or part-timers in the establishment and has not more than 50 employees in all firms within an enterprise.

This definition took into account three important factors. These were that a small firm:

1) Should not form part of a large enterprise, i.e. not more than 50 employees;

2) Should have a small size of management, on the average 3 managers;

3) Should have a small workforce, i.e. 50 employees.

Using this definition, a total of 144 firms (79%) were classified as small firms while large firms were 39 (21%). This definition was clearly distinct from the previous one which included small firms forming part of a larger enterprise into small size category which accounted for a proportion of 92% of all firms. These two definitions were statistically different at 0.0000 significance level (see tables 7.12 and 7.13). It is therefore indisputable that disregarding establishments which

form part of a larger enterprise and the span of control of 3 managers (or 45 employees) in small firm definition would be wrong. When small firms only were considered using the new definition for a small firm, 88% of the firms had a maximum of 3 managers when the firm got a manufacturing licence and 85% of the firms had a maximum of 3 present managers. The average number of present managers was 2. But it was 4 for the large firms. These differences were statistically significant at 0.0000, with

F-value of 30. (see table 7A.41). When top management one tier system was applied, the results were even more astonishing as a proportion of 98% of all small firms had a maximum of 3 managers. The average number of managers per small firm was 1.3 But this was close to 2 for large firms. The firm was different in this respect at 0.0027 significance level (table 7A.43).

TABLE 7.12 NEW SIZE OF FIRM WHEN OPERATIONAL BASED ON NUMBER OF EMPLOYEES PER ENTERPRISE BY OLD SIZE OF FIRM WHEN OPERATIONAL BASED ON NUMBER OF EMPLOYEES LESS THAN 50 PER ESTABLISHMENT

SIZE OF FIRM BASED ON ENTERPRISE	SIZE OF FIRM BASED ON ESTABLISHMENT		
	SMALL BUSINESS	LARGE BUSINESS	
	No. Row % Col. %	No. Row % Col. %	Total No. Row. %
SMALL BUSINESS	144 100.0 85.7		144 78.7
LARGE BUSINESS	24 61.5 14.3	15 38.5 100.0	39 21.3
Column Total No.	168	15	183
Column Total %	91.8	8.2	100.0

X^2 = 55, P = 0.0000, Phi = 0.57, No. Missing = 35

TABLE 7.13 ESTABLISHMENT'S (RESPONDING FIRM'S) SIZE BAND NOW BY SIZE BAND OF ENTERPRISE NOW (ALL FIRMS OWNED)

ESTABLISHMENT'S SIZE BAND NOW OWNS A BUSINESS	SIZE BAND OF ENTERPRISE NOW				
	20 & BELOW No. Row % Col. %	21-50 EMPLOYEES No. Row % Col. %	51-100 EMPLOYEE No. Row % Col.%	101 & ABOVE No. Row % Col.%	Total No. Row. %
20 & BELOW	89 80.2 97.8	13 11.7 26.5	5 4.5 25.0	4 3.6 21.1	111 62.0
21-50 EMPLOYEES	2 4.3 2.2	36 78.3 73.5	5 10.9 25.0	3 6.5 15.8	46 25.7
51-100 EMPLOYEE			10 83.3 50.0	2 16.7 10.5	12 6.7
101 & ABOVE				10 100.0 52.6	10 5.6
Column Total No.	91	49	20	19	179
Column Total %	50.8	27.4	11.2	10.6	100.0

X^2 = 252; P = 0.0000; Cramer's V = 0.69; No. Missing = 39

7.5.3 EMPLOYMENT CREATION AND SIZE OF FIRM

Employment creation was examined over ten, five, two and one year periods. The Same firm cohorts that were formed in 1965, 1970 and 1975 were traced for periods of five and ten years in order to find the level of employment formation. Then those that stated in 1980 were followed for a five year, three year, two year and one year periods. The next group was the firms that commenced in 1981 and 1982. These were examined at three, two and one year intervals. This was followed by the 1983 firms which

were studied for two years and one year. The last group to be analysed, for a period of one year, was for firms that were set up in 1984. Since firms established in the same base years were investigated over the same periods, differences in employment could be due to time intervals or size of firms. In this analysis, a total of 161 firms, 126 small and 35 large with valid data on initial employment in the establishment when the firms became operational, total employment in the enterprise and employment levels in the years of interest were studied. Thus a total of 57 cases were excluded.

Results showed that in general, firms created more employment over a medium term of three years than over a long term of five or ten years (table 7.14). The table gives total employment and percentage change for all firms taken together. It also gives per The table for example shows that firms created in 1965 and 1970 gained 66 and 12 employees respectively five years later. But the same firms lost 37 and 167 jobs over a longer period of 10 years i.e. by 1975 and 1980 respectively (see the last column for 10 year firm cohorts). Like wise firms formed in 1980 created a total of 310 jobs three years later or an increase of 49% (see fourth column for three year firm cohorts). But by 1985, the total jobs generated of the five year period had declined to a total of 78 jobs only (fourth column for five year firm cohorts). The rest of the table is interpreted in a similar manner.

Table 7.15, breaks down the employment change in table 7.14 into small and large firms and provides per centage changes. It was also discovered that on the avarage, small firms contributed

more jobs in the short and long term than in the medium term as table 7.15 shows. As an illustration, it can be seen that out of the total of 27 jobs created by all firms, which became operational in 1980 and existed for one year (see table 7.14 second column), small firms created 26 jobs while the contribution of large firms was 1 job over the same period (table 7.15).

Reference to five year period, shows that for firms that were established in 1985, out of the total jobs of 68 created by all firms over a five year period (from table 7.14), about 50% of these were created by small firms (table 7.15). But a total loss of 37 jobs was recorded for the same cohort group of firms over a ten year period. This was 184% of the total jobs created. The loss in employment was caused by large firms which incurred a huge loss of 105 jobs or a rate of -2.8 (see table 7.15).

Table 7.15 also shows that firms that were established in 1970 created a net total of 12 jobs only over a five year period. They incurred a net loss of -167 over a ten year period. They also contributed 36 jobs (22%) of total over a ten year period from 1970 to 1980. Large firms gained 2 jobs only over the same five year period of 1970 to 1975. But they experienced a huge loss of 203 jobs or about 1.2 times the total.

It can also be seen from table 7.15 that firms that became operational in 1975 created a total of 30 jobs for a five year period and a total of 91 jobs for a ten year period. Of these, small firms contributed 80% and 78% of the jobs generated during the five and ten year periods respectively.

As regards the firms that began in 1980, the same table shows that small firms realised increased employment changes over the one, two, three and five year periods. The employment changes were 10%, 37%, 38% and 78% over the same periods. They however performed better than large firms in their shorter term periods of one and two years when their contribution to total employment were: 90% and 73%. In the medium term of three and five years large firms did better as their shares were: 68% and 57%.

In the case of firms formed in 1981, both small and large firms increased their employment levels for the periods one year to three years. However, large firms out-performed small ones as their contributions were: 97%, 78% and 60% for the one, two and three year periods respectively. The rest of the table is interpreted in the same way.

Table 7.15 also gives grand total jobs generated by firms established in different years but existed over the same period. This can be done by summing up the columns of total employment change for small or large firms. For example, over a one year period (second column), large firms generated 150 jobs compared to 178 for small ones. Two year large cohort firms contributed a total of 273 compared to small firms of 397. But large firms made 638 compared to 383 for small over a three year period.

For separate analysis of the performance of large and small firms refer to tables 7.16 and 7.17 respectively. These tables break down the total employment of various year cohorts for each group.

In conclusion, it therefore appeared that small firms performed better than large firms in the long term than in the short term. But within the small firms category, small firms performed better in the short to medium term than they did in the longer term.

These differences were tested using student's t-test. Results revealed that small firms created more employment in the long term of ten years than large firms. These differences were statistical significant at 0.04. But there were no statistical differences between small and large firms over one, two three or five year periods (see tables 7.18(a) to (e)). Therefore contrary to the hypothesis, findings revealed that small firms created more employment in the short and long term than large firms.

Financial analysis was also done in order to have an idea of the performance of small firms. Results showed that the average initial capital investment per job were K40,000 for all firms. But the small firm's investment was about K40,000 while it was K39,000 for large firms. These were not statistically significant since the F-value was 0.0047 at 0.95 significance level (table 7A.44). The average asset investment was K18,000 for the entire population, distributed as K16,000 and 27,000 for small firms and large firms respectively. This was not significant (table 7A.45).

Respondents were asked to indicate the number of employees they would add to their workforce in 1988 and 1987. The average for 1988 was 3 only while this was 5 for 1987. There was no statistical difference between small and large firms. This reflected the sad economic situation facing many firms whether small or large.

Table 7.14 Distribution of gross employment and employment change in all firms in various year cohorts between 1965-1985.

DISTRIBUTION OF TOTAL EMPLOYMENT AND EMPLOYMENT CHANGE IN ALL FIRMS IN VARIOUS YEAR COHORTS FROM 1965 TO 1985

	1 YEAR FIRM COHORTS				2 YEAR FIRM COHORTS				3 YEAR FIRM COHORTS				5 YEAR FIRM COHORTS				10 YEAR FIRM COHORTS			
CURRENT YEAR	BEGIN EMPLOY	ENDING EMPLOY	TOTAL EMPL. CHANGE	%	BEGIN EMPLOY	ENDING EMPLOY	TOTAL EMPL. CHANGE	%	BEGIN EMPLOY	ENDING EMPLOY	TOTAL EMPL. CHANGE	%	BEGIN EMPLOY	ENDING EMPLOY	TOTAL EMPL. CHANGE	%	BEGIN EMPLOY	ENDING EMPLOY	TOTAL EMPL. CHANGE	%
1965													1089	1133	44	4	1089	1052	-37	-3
1970													806	818	12	1	806	659	-147	-21
1975													329	397	30	9	329	460	91	29
1980	631	658	27	4	631	767	135	22	631	991	360	49	631	1126	495	78				
1981	389	705	155	28	389	804	294	44	389	1025	675	86								
1982	339	402	63	19	339	476	137	40	339	965	284	60								
1985	185	242	59	32	185	326	145	78												
1984	262	286	24	9																
TOTAL	1965	2235	330		1765	2373	670		1559	2987	987		2825	3428	685		2194	2081	-113	

Table 7.15 Distribution of total employment change for large and small firms 1965-1985

EMPLOYMENT CREATION AND PERCENTAGE CHANGE FOR ALL FIRMS SMALL AND LARGE IN VARIOUS YEAR COHORTS FROM 1965 TO 1985

	TOTAL EMPL & % CHANGE FOR 1 YEAR FIRM COHORTS				TOTAL EMPL & % CHANGE FOR 2 YEAR FIRM COHORTS				TOTAL EMPL & % CHANGE FOR 3 YEAR FIRM COHORTS				TOTAL EMPL & % CHANGE FOR 5 YEAR FIRM COHORTS				TOTAL EMPL & % CHANGE FOR 10 YEAR FIRM COHORTS			
CURRENT YEAR	ALL FIRMS	LARGE FIRMS	SMALL FIRMS	%	ALL FIRMS	LARGE FIRMS	SMALL FIRMS	%	ALL FIRMS	LARGE FIRMS	SMALL FIRMS	%	ALL FIRMS	LARGE FIRMS	SMALL FIRMS	%	ALL FIRMS	LARGE FIRMS	SMALL FIRMS	%
1965													44	35	35	39	-37	-105	68	-184
1970													12	2	10	83	-147	-205	35	-22
1975													30	6	24	80	91	19	72	79
1980	27	1	26	96	135	37	97	73	360	299	101	35	495	284	211	43				
1981	155	150	5	3	294	201	93	31	675	382	93	20								
1982	63	14	49	78	137	35	102	74	284	35	149	85								
1985	59	0	59	100	145	0	145	100												
1984	24	-15	39	163																
TOTAL	934	1084	150		897	1132	273		897	1483	635		2116	2041	335		1794	1445	-389	

Table 7.16 Distribution of large firm's gross total employment and employment change for various year cohorts 1969-1985

TOTAL EMPLOYMENT CREATION AND EMPLOYMENT CHANGE FOR LARGE FIRMS FOR VARIOUS YEAR COHORTS FROM 1969 TO 1985

	1 YEAR FIRM COHORTS				2 YEAR FIRM COHORTS				3 YEAR FIRM COHORTS				5 YEAR FIRM COHORTS				10 YEAR FIRM COHORTS			
COHORT YEAR	GROSS EMPLOY	GROSS EMPLOY	TOTAL EMPL CHANGE	%	GROSS EMPLOY	GROSS EMPLOY	TOTAL EMPL CHANGE	%	GROSS EMPLOY	GROSS EMPLOY	TOTAL EMPL CHANGE	%	GROSS EMPLOY	GROSS EMPLOY	TOTAL EMPL CHANGE	%	GROSS EMPLOY	GROSS EMPLOY	TOTAL EMPL CHANGE	%
1969													869	885	16	4	869	703	-165	-42
1970													678	680	2	0	678	676	-202	-59
1971													266	282	6	3	266	228	19	9
1972	362	355	-1	0	362	397	37	10	362	571	209	58	362	645	284	78				
1973	295	415	120	45	363	546	201	55	363	727	362	111								
1974	132	146	14	9	132	187	55	35	132	187	55	35								
1975	0	0	0	.	0	0	0	.												
1976	75	60	-15	-20																
TOTAL	934	1001	130		859	1132	273		859	1485	626		2116	2991	333		1720	1608	-389	

Table 7.17 Distribution of small firm's gross total employment and employment change for various year cohorts 1969-1985

TOTAL EMPLOYMENT CREATION AND EMPLOYMENT CHANGE FOR SMALL FIRMS FOR VARIOUS YEAR COHORTS FROM 1969 TO 1985

	1 YEAR FIRM COHORTS				2 YEAR FIRM COHORTS				3 YEAR FIRM COHORTS				5 YEAR FIRM COHORTS				10 YEAR FIRM COHORTS			
COHORT YEAR	GROSS EMPLOY	GROSS EMPLOY	TOTAL EMPL CHANGE	%	GROSS EMPLOY	GROSS EMPLOY	TOTAL EMPL CHANGE	%	GROSS EMPLOY	GROSS EMPLOY	TOTAL EMPL CHANGE	%	GROSS EMPLOY	GROSS EMPLOY	TOTAL EMPL CHANGE	%	GROSS EMPLOY	GROSS EMPLOY	TOTAL EMPL CHANGE	%
1969													289	242	35	16	289	277	48	35
1970													133	139	10	8	133	144	35	28
1971													165	137	28	25	165	175	22	70
1972	297	293	26	100	297	388	99	375	297	370	101	38	297	469	221	78				
1973	159	195	5	32	159	243	55	202	159	255	95	49								
1974	107	135	49	214	107	207	102	95	107	256	149	99								
1975	105	202	99	202	105	326	145	78												
1976	107	205	39	211																
TOTAL	1046	1194	178		859	1226	397		646	1009	365		709	987	298		449	645	176	

Table 7.18(a) Student T-test of difference in job creation between large and small firms over one year period

Size of Firm	No. of Cohorts	Mean	Sd.	Se.
Small Firms	5	35.8	21.0	9.4
Large Firms	5	30.0	67.9	30.4

Pooled Variance Estimate : T = 0.18 P = 0.864 (2-Tailed)
Separate Variance Estimate : T = 0.18 P = 0.867 (2-Tailed)

Key for abreviations
Sd. = Standard deviation Se. = Standard Error

Table 7.18(b) Student T-test of difference in job creation between large and small firms over a two year period

Size of Firm	No. of Cohorts	Mean	Sd.	Se.
Small Firms	4	99.3	36.8	18.4
Large Firms	4	68.3	90.1	45.1

Pooled Variance Estimate : T = 0.64 P = 0.548 (2-Tailed)
Separate Variance Estimate : T = 0.64 P = 0.550 (2-Tailed)

Table 7.18(c) Student T-test of difference in job creation between large and small firms over a three year period

Size of Firm	No. of Cohorts	Mean	Sd.	Se.
Small Firms	3	121.0	41.8	24.1
Large Firms	3	206.7	173.5	100.2

Pooled Variance Estimate : T = -0.85 P = 0.443 (2-Tailed)
Separate Variance Estimate : T = -0.85 P = 0.478 (2-Tailed)

Table 7.18(d) Student T-test of difference in job creation between large and small firms over a four year period

Size of Firm	No. of Cohorts	Mean	Sd.	Se.
Small Firms	4	89.5	94.8	47.4
Large Firms	4	81.3	135.9	67.9

Pooled Variance Estimate : T = -0.14 P = 0.892 (2-Tailed)
Separate Variance Estimate : T = -0.14 P = 0.892 (2-Tailed)

Table 7.18(e) Student T-test of difference in job creation between large and small firms over a ten year period

Size of Firm	No. of Cohorts	Mean	Sd.	Se.
Small Firms	3	58.7	19.7	11.4
Large Firms	3	-86.3	111.3	64.2

Pooled Variance Estimate : T = 2.38 P = 0.076 (2-Tailed)
Separate Variance Estimate : T = 2.38 P = 0.133 (2-Tailed)

CHAPTER 8.0 ADEQUACY OF SBIS DEGREE PROGRAMMES AND GRADUATES' EXPERIENCES

8.1. INTRODUCTION

Empirical results of chapter 6 confirmed that SBIS graduates do not start businesses, though they have positive attitudes. This chapter investigates whether this situation is due to inadequate preparation at SBIS.

When arguing whether a policy of supporting all small businesses, was a sound one, it was shown in chapter 2 appendix 2A.6 that some trainers, educators and business people question "the need for and usefulness of" small business training since "it is unwanted and in some cases impossible to deliver" (Solomon and Carvey, Autumn, 1985:25). Results of SBA survey on "the state of Small Business Training and education" showed that "direct intervention into the small business training market would be the last resort" (Solomon and Carvey, 1985:25 & 31). The low profile of SBA is partly influenced by reluctance of businessmen to accept management training as their counter parts do in the U.K. who refer to "the impossibility of any one telling me how to do my job"; or who describe of why "my firm is different and unique" (Watkins, Spring, 1983:29).

It was however argued that small businessmen's view of adequacy could be self-deception since other studies had shown that most people are not armed with skills of starting business upon leaving school. It was advanced that in the case of Zambia this was the position, for example, for graduates. This would therefore tend to show the need for management education.

In order to find out the suitability of the SBIS programmes in preparing graduates for business start ups and employment in small and large firms, the third main hypothesis of this thesis was that students and graduates from the Copperbelt University's School of Business and Industrial Studies, CBU-SBIS have negative attitudes towards self-employment or wage paid employment in the small manufacturing sector. They prefer executive positions in Large firms.

To test whether their negative attitudes, if any, were influenced by their attitudes towards the educational preparations they received at SBIS, the null and alternative hypotheses were therefore:

Hypothesis 1:

H_0 : There is no difference in students' or graduates' attitudes towards the adequacy of SBIS degrees in preparing them for starting their own businesses.

H_1 : More students or graduates have negative attitudes towards the adequacy of the degree in preparing them to start their own businesses.

Hypothesis 2:

H_0 : There is no difference in students' or graduates' attitudes towards the adequacy of SBIS degrees in preparing them for careers in small businesses.

H_1 : Students or graduates feel that SBIS degrees are not suitable to prepare them for jobs in small businesses.

Hypothesis 3:

H_0 : There is no difference in students' or graduates feelings towards the adequacy of SBIS degrees in preparing them for careers in Large businesses.

H_1 : Students and graduates have positive attitudes towards the adequacy of SBIS degrees in preparing them for careers in Large businesses

Hypothesis 4

H_0 : There is no difference in students' or graduates attitudes towards the adequacy of SBIS degrees in preparing them for assuming positions in large or small businesses or starting their own businesses.

H_1 : There is a difference in students and graduates attitudes and in particular more students feel that SBIS degrees prepare them more adequately for employment in large firms or small firms than in starting their own businesses.

The associated objective to statistically test the null and alternative hypotheses regarding students and graduates attitudes towards SBIS degrees was:

> To examine their views on the effectiveness of the SBIS degree programmes in imparting knowledge and developing skills in them to enhance their capacity to take up careers in:
>
> a) Self -employment;
> b) Small businesses;
> c) Large businesses.

In order to achieve this objective and to discover whether their attitudes towards any one of the three options for their careers were related to their attitudes towards the effectiveness of the SBIS degrees programmes, the research study examined students' and graduates views by presenting to them three Likert type statements of the strongly agree to strongly disagree on a five point rating scale. They were also asked specific questions on the courses offered by SBIS. In addition, an open ended question sought for graduates' additional comments on the degree in the light of their working experiences. The aim of asking questions on specific courses was to use the results for making recommendations, if any, to SBIS for possible changes in the school's course offerings.

In studying the relationship between their attitudes on the effectiveness of SBIS degrees to their career selections, both students and graduates were asked to evaluate (on a five point scale) factors that may influence or discourage them to work in small or large business.

Further, they were also asked various questions relating to their working prospects and experiences in working in small or large firms. Still further, their attitudes towards taking up careers in self-employment were examined through a series of questions relating to their first activity after graduation and the time they will start a business.

This Chapter concentrates on the attitudes of students and graduates on the adequacy of SBIS degrees in preparing them for careers in large and small businesses, and in forming their businesses. Chapter 6 discussed students' factors that may influence them or discourage them to take up careers in large businesses.

On the whole both students and graduates appeared to have positive views towards SBIS degrees. A great majority of 82% (148 out of 181) students agreed to a statement that the SBIS degrees were adequate for employment in a large firm while 76% of 254 graduates did so. Responding to a suggestion that SBIS degree was inadequate to prepare them for a job in a small business, 80% of students disagreed while an overwhelming majority of 82% of the graduates did so. A smaller proportion of 59% of students and 61% of graduates argued against a statement that SBIS degree was inadequate to prepare them to start their own business.

There was therefore a range of 18% to 41% who were not positive, particularly on the starting of their own businesses. This for example implied that 2 out of 5 respondents felt that the degrees did not prepare them adequately for starting businesses. Again 1 in 5 felt that the degrees did not adequately prepare them for jobs in small or large businesses. These views were strongly revealed in the qualitative rich data obtained from graduates' additional comments on the open ended question which invited them to make comments on the degrees.

It was, however, discovered later when analysing the results that the researcher's approach of evaluating the degrees in relation to their attitudes on their adequacy for employment in small or large firms and starting their businesses and particularly the whole approach of emphasis on small business was not liked by many respondents.

Their additional comments on the degree revealed that problems relating to the degrees were more important issues to them than the subject of small businesses. It also transpired that other respondents were either not aware that they could make any comments on the degree or they felt that such comments were not required. The later were very critical of this research study which put emphasis on the small business when a more critical issue was the acceptability of the accountancy degree by employers. Makasa[1], a 1983 graduate, then an operations accountant, who was studying ACCA in London said:

> The degree course I did is elaborate...is invaluable ... in my view...which of course one can put to [work]... quite efficiently ...under any business environment. I would have however wished to talk about the adequacy or indeed the relevance of the accountancy degree under so much

> public ridicule, but [that] would be a digression. ...The questionnaire places emphasis on the small scale industry issues in the presence of an enormous amount of public ridicule of the accountancy education ... This is of immense interest for us and one that requires conceited effort to remedy.

Still a third stated:

> The questionnaire is quite interesting and I personally liked it. I however feel that it overlooked ... the most important aspects of the SBIS and its products (that is, the graduates) with regard to the requirements and expectations of the business world .... There seems to be a significant gap between industries in practice and the graduates qualifying from the School ... evidenced by the fact that most of the graduates, if not all, have had to take up studies again at almost the same level ... except that this time at professional level [emphasis mine].

Similarly, views by 74% (39 out of 53) who shared their experiences on the acceptability of the accountancy degree stated that the degree was not accepted. It is admitted that evaluation of the accountancy degree was not the main subject of this study. It is however not always possible to include many valuable issues or investigate them to the same extent if included, in a single research topic. It is often difficult to make a balance even in an integrated research study such as this one due to many constraints. This study had in fact tackled more issues than would normally be expected.

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[1]All names relating to individuals in this study are fictitious to preserve the anonyaity of respondents as guaranteed when conducting fieldwork. Names were used merely to facilitate reference, readability and avoid monotonous repetition of such phrases as "another graduate". However, year of study, positions held in companies, companies names or geographical residential places are real.

It was against this background of the criticisms indicated above and in consideration of the respondents' enthusiasm in providing rich qualitative data and in anticipation of the value of the findings from this research to SBIS that it was decided to expand the items of the sub topics included in the adequacy of the SBIS degrees by including the last three items as:

a) Attitudes towards adequacy of SBIS degrees for starting own businesses;

b) Attitudes towards adequacy of SBIS degrees for working in small businesses;

c) Attitudes towards adequacy of SBIS degrees for working in large businesses;

d) General weaknesses of SBIS degree programmes

e) Non-acceptability of the BAc degree

f) Strengths of SBIS degrees.

The original plan was to quote a few of their comments when discussing the adequacy of the degree. However, in the new approach, in addition to transforming their comments into quantity data, content analysis of their comments was used instead of statistical approach only, for two reasons. First, it was thought this would give a rich flavour to the findings on the courses offered by the school. Second, it was found to be the most appropriate approach because there were no sufficient cases to apply statistical tests. This was so because although 43% (110 out 254) offered various additional comments, not every respondent commented on the same issues. The aim of content analysis was to find patterns in their arguments. It was hoped that threading through all the arguments would give a pretty good idea of the main findings on this issue. Percentages were however given from the transformed quantity data where appropriate just

to show the trend of their arguments. Content analysis was integrated with statistical analysis where variables under discussion had been originally included in the main questionnaire. This was particularly so on their attitudes of the adequacy of the degrees in preparing them for starting their own businesses, working in small or large businesses and on individual courses as will be shown later. This was done in order to supplement each other, enhance readability and reduce boredom of reading figures only, as may have already experienced when urban population concentration was analysed above.

Discussion first focused on their attitudes on the adequacy of the Bachelor of Business Administration (BBA) and the Bachelor of Accountancy (BAc) in preparing them for starting up their own businesses. This was followed up by a discussion of the adequacy of the degrees in preparing them to take up jobs in small firms and also in large firms.

Analysis of attitudes on SBIS degrees was accomplished by looking at students'' and graduates' attitudes separately and then comparing their views. In this approach, the first stage involved studying each of the two group's views on each of the three issues, namely appropriateness of SBIS degrees for starting businessmen working in a small firm and working in a large firm. The second stage in the analysis was comparing students' and graduates' attitudes on the three aspects just mentioned. The third stage involved examination of students' and graduates' responses separately on the degrees' suitability to provide knowledge in the three areas of forming business, working in a small firm and working in a large firm taken together. Since a

three dimensional analysis was not possible with chi-square analysis, this process was accomplished by comparing two areas at a time. This therefore meant that the first step in the third stage needed testing appropriateness of the degrees in both starting business and working in a small firm. Analysis in the second step required the analysis of the rightness of SBIS degrees for both starting business and working in a large business combined together. The third step in the analysis was finding the degrees fitness for both working in small and large business. The Fourth and last stage of analysis of the suitability of SBIS degrees required combining students and graduates and then finding their views on all the three areas taken together as described in stage 3.

Focus was then shifted to analysis of criticisms of the general weaknesses of the SBIS degrees. Then attention was moved to examination of specific analysis of individual courses offered by SBIS. This was then followed by analysis of the graduates criticisms of the non-acceptability of the BAc degree by employers, the associated reasons, their experiences and recommendations. Finally, the section looked into the strengths of SBIS degrees experienced and observed by graduates. The section was concluded by presenting a summary on the adequacy of SBIS degrees.

8.2 ATTITUDES TOWARDS ADEQUACY OF SBIS DEGREES FOR STARTING BUSINESS

Students' and graduates' attitudes towards starting business were analysed separately for each group and then compared to find differences if any between the two groups. Generally speaking both groups were positive because 3 out of 5 had positive attitudes.

8.2.1 STUDENTS' ATTITUDES TOWARDS ADEQUACY OF SBIS DEGREES FOR STARTING BUSINESS

Generally speaking students had positive attitudes towards the adequacy of SBIS degrees in preparing them to start businesses. About 59% disagreed to a statement suggesting that SBIS degrees were inadequate compared to 23% who agreed and 18% who were not sure. It should however be noted that about 2 out of 5 were not positive (see table 8.1).

When analysis was broken down to sex, type of degree aspired for and year of study, there were no significant differences regarding the suitability of the degrees for starting business.

The same findings were obtained when year of study and type of desired degree were held constant for starting businesses. However, when sex was held constant, and females considered separately for the year of study, a significant difference of 0.0352 was found. Nearly 4 out of 10 (36%) agreed that the degree was inadequate and about the same number (42%) thought it was

adequate. A large proportion of 23% were not sure. The difference arose because a great proportion of 67% of third year female students thought it was not suitable while this was 20% for 2nd years and 25% for first years. But a smaller proportion of 33% of third year female students thought it was suitable while this was 30% for 2nd years and 58% for first years. No third year female student was unsure while 50% of 2nd years and 17% of first years were. This was a surprising finding because there was no readily available explanation why third year female students felt they were not adequately prepared to start businesses.

Table 8.1 INADEQUACY OF DEGREE FOR STUDENTS TO START BUSINESS BY PREFERRED TYPE OF DEGREE

DEGREE IS INADEQUATE	TYPE OF DEGREE		
	BUSINESS ADMIN. (B.A)	ACCOUNTANCY (BAc)	
	No. Row % Col. %	No. Row % Col. %	Total No. Row. %
AGREE	11 26.2 22.9	31 73.8 23.3	42 23.2
NOT SURE	10 31.3 20.8	22 68.8 16.5	32 17.7
DISAGREE	27 25.2 56.3	80 74.8 60.2	107 59.1
Column Total No.	48	133	181
Column Total %	26.5	73.5	100.0

X^2 = 0.5; P = 0.8; Cramer's V = 0.05; No. Missing = 0

8.2.2. GRADUATES' ATTITUDES TOWARDS ADEQUACY OF BBIS DEGREES FOR STARTING BUSINESS

When graduates were considered, results revealed that about 61% of them disagreed with the statement that the degree was not suitable for starting business while 25% agreed and 14% were not sure (see table 8.2).

When sex, type of degree or year of graduation were held constant, findings showed that there were no significant differences among females and males and year when they graduates, or year of of graduation and type of degree. There was however a statistically significant difference of 0.0267 among males and females when type of degree was examined separately. In particular, a larger proportion of 28% of male accounting graduates thought the degree was not suitable for starting a business while the proportion was 18% for females. Further a larger proportion of 28% of females were uncertain while 11% of males were not sure. But a slightly larger proportion of 61% of male BAc graduates believed it was proper while 56% of females thought so. This was an expected finding as it was not clear why more males than females were more definite that the degree was unsuitable. As far as the BBA graduates were concerned, there were no significant differences.

Thus in general, graduates had positive attitudes towards adequacy of the degree. But as in the case of students, only about 3 out of 5 persons were positive. Thus 2 out of 5 were not.

Table 8.2 INADEQUACY OF DEGREE FOR GRADUATES TO START BUSINESS BY BASIC YEAR OF GRADUATION FROM SBIS

DEGREE IS INADEQUATE	BASIC YEAR OF GRADUATION			
	1981 TO 1982	1983 TO 1984	1985 TO 1986	
	No. Row % Col. %	No. Row % Col. %	No. Row % Col.%	Total No. Row. %
AGREE	21 33.3 29.2	26 41.3 31.0	16 25.4 18.6	63 26.0
NOT SURE	8 25.0 11.1	10 31.3 11.9	14 43.8 16.3	32 13.2
DISAGREE	43 29.3 59.7	48 32.7 57.1	56 38.1 65.1	147 60.7
Column Total No.	72	84	86	242
Column Total %	29.8	34.7	35.5	100.0

X^2 = 4; P = 0.4; Cramer's V = 0.09; No. Missing = 12

8.2.3 COMPARISON OF STUDENTS' AND GRADUATES ATTITUDES TOWARDS THE ADEQUACY OF SBIS DEGREE FOR STARTING BUSINESS

The next stage in the analysis was to compare students and graduates views. The combined analysis of results showed that a total of 60% disagreed with the statement that SBIS degrees were inadequate to start a business. About 16% were not sure and 24% agreed. Hence, only a total of 3 out of 5 were positive. There were however no statistical differences between the two groups as about 59% of students disagreed while 61% of graduates disagreed. About 18% and 14% of students and graduates were not sure respectively. A proportion of 23% of all students and 25% of all graduates agreed that it was inadequate. This analysis again showed that about 2 out of 5 respondents were not positive. This

finding tended to agree with the general conclusions made earlier about the unsuitability of the degree for starting business by each of the the two groups (see table 8.3).

Table 8.3 INADEQUACY OF DEGREE TO START BUSINESS BY UNIVERSITY RESPONDENT'S CATEGORY

DEGREE IS INADEQUATE	UNIVERSITY RESPONDENT'S CATEGORY		
	STUDENT No. Row % Col. %	GRADUATE No. Row % Col. %	Total No. Row. %
AGREE	42 38.8 23.2 9.7	64 60.4 25.2 14.7	106 24.4
NOT SURE	32 47.1 17.7 7.4	36 52.9 14.2 8.3	68 15.6
DISAGREE	107 41.0 59.1 24.6	154 59.0 60.8 35.4	261 60.0
Column Total No. Column Total %	181 41.6	254 58.4	435 100.0

X^2 = 1; P = 0.6; Cramer's V = 0.05; No. Missing = 0

8.2.4. REASONS FOR SOME NEGATIVE ATTITUDES TOWARDS ADEQUACY OF SBIS DEGREE FOR STARTING BUSINESS

It is clear from above that about 2 out of 5 respondents, both students and graduates were apprehensive about the adequacy of SBIS degree for starting business. The explanations for the 2 out of 5 not being positive were given by additional statements from graduates. There were two basic reasons that would

contribute to graduates' failure to start businesses. The first was lack of appropriate courses at SBIS where teaching of business start-ups was taught. There was some indignation on the lack of courses aimed at teaching students the processes of starting businesses or at least arousing their interest in choosing business ownerships as a career. The second reason mentioned was lack of experience and capital. These two reasons were the same ones advanced in response to a question asking them when they would start a business in a different question. Fabusiwa a 1986 graduate, then a management trainee, castigated the school for offering courses which:

> Just groom us to take up salaried jobs and not to begin [our] own businesses

Kapengwe, a 1983 graduate, then a branch manager with (United Bus Company of Zambai) UBZ who also blamed the course structures for grooming students to fit into large firms shared similar views when he stated:

> There is a great need to give option for alternative employment by offering courses geared to offer the graduate knowledge to start his own business in the small scale industrial sector ...now that jobs in large organisations are hard to get...

Similar views were expressed on the inadequacy of the SBIS courses in preparing graduates to start up their own businesses. Turok, a 1986 graduate, who was then a lecturer at SBIS called on the University to make attempts

> to explore opportunities in various industries so as to stimulate students in starting their own firms [as opposed to the present system where students are indoctrinated during lectures to fit into] the shoes of an executive, working for a large or a medium sized firm. [Thus they become] rigid in their attempts to secure employment [as they prefer] waiting for salaried jobs.

Although the calls for offering courses in business start ups were deemed to be important, there was a feeling that two essential components were needed in addition to book knowledge. These were itemised as capital and experience. Kapulo, a 1988 unemployed graduate observed that SBIS courses do not teach the process of:

> starting your own business. It is also difficult for a student who has just graduated to start his own business as capital is required.

Geofrey, a trainee accountant who graduated in 1985 expounded on the need for capital and experience which he stated were the basic factors that would influence him to start a business:

> I do believe that experience and finance would be the critical minimum for my decision to go into business... Remember you cannot get experience through reading but by active participation

On the need of encouraging graduates taking up careers in small business (as employees or business owners). Comments above showed that graduates felt that there was a need to introduce courses in business start ups. Some students called for the introduction of specific courses. Others recommended to the University to interact with the business community in order to encourage graduates starting up their own businesses. A 1982 graduate, then a lecturer at the university said:

> SBIS courses (in particular BBA programmes) are grossly inadequate in preparing students for careers in small business. Teaching methods... should more and more incorporate "actor-learning" approaches so that students get a feel of practical realities in the field. SBIS could consider establishing a small business centre whose function among other things would be to provide advice to budding entrepreneurs in the country....This can be done in close co-ordination with SIDO.

As in the case of the BAc degree as will be seen later, graduates recommended the need to get in touch with the business community. Fabusiwa, a 1986 graduate who was a management trainee, complained:

> students are not given opportunities to meet people in industries who have their own business [by the school although] students themselves, through UNZAMA [University of Zambia Management Association] make efforts to bring these people to the school. But they [students] do not get the necessary support from the school...This should be done by the school because of the difficulties that students encounter in bringing these people to the school.

8.3 ATTITUDES TOWARDS ADEQUACY OF BBIS DEGREES FOR WORKING IN SMALL BUSINESS.

Students' and graduates' attitudes towards the suitability of the degrees for working in small business were again studied separately. Generally speaking the two groups were very positive on the suitability of the degrees. A total of 8 out of 10 were positive and 1 out of 10 negative while about 1 out of 10 were not sure.

Table 8.4 INADEQUACY OF DEGREE FOR JOB IN SMALL BUSINESS BY STUDENT'S YEAR OF STUDY IN 1985/86

DEGREE IS INADEQUATE	YEAR OF STUDY IN 1985/86			
	1ST YEAR	2ND YEAR	3RD YEAR	
	No. Row % Col. %	No. Row % Col. %	No. Row % Col.%	Total No. Row. %
AGREE	8 40.0 14.3	6 30.0 10.5	6 30.0 6.8	20 11.0
NOT SURE	6 37.5 10.7	5 31.3 8.8	5 31.3 7.4	16 8.8
DISAGREE	42 29.0 75.0	46 31.7 80.7	57 39.3 83.8	145 80.1
Column Total No.	56	57	68	181
Column Total %	30.9	31.5	37.6	100.0

X^2 = 2; P = 0.8; Cramer's V = 0.07; No. Missing = 0

8.3.1 STUDENTS' ATTITUDES TOWARDS ADEQUACY OF SBIS DEGREES FOR WORKING IN SMALL FIRMS

Findings showed that there was an overwhelming positive attitude represented by 80% of students who disagreed to a suggestion that SBIS degree was inadequate to prepare them for a job in a small business. A small percentage of 11% were agreeable while 9% were not sure. Thus a total of 20% or 1 out of 5 were not positive (see table 8.4). The same findings were obtained when analysis was broken down to sex, type of desired degree and year of study. There were again no significant differences when either sex or desired type of degree or year of study were held constant.

8.3.2 GRADUATES' ATTITUDES TOWARDS ADEQUACY OF SBIS DEGREES FOR WORKING IN SMALL BUSINESS

Commenting on the suitability of SBIS degrees for working in a small business, an overwhelming majority of 82% of the graduates disagreed to a suggestion that it was not right. A very small proportion of 8% agreed and 10% were not sure. As in the case of students, this again showed that 1 out of 5 persons was not positive. When crosstabulation by type of degree was done, this revealed that more business administration than accounting graduates perceived the degree as not being suitable (see table 8.5).

When analysis was broken down and sex held constant, there was no difference between BBA and BAc graduates. The same conclusions were reached when type of degree was held constant to investigate differences between males and females, and also

differences among the three main graduating groups of 1981 to 1982, 1983 to 1984, and 1985 to 1986.

However when year of graduation was held constant, results showed that there was a significant difference of 0.0021 between BBA and BAc who completed between 1981 and 1982. This indicated that more BAc accounting for 87% than 68% of BBA thought that the degree was adequate. About 24% of BBA were not sure while there was none in the BAc group. About 8% and 13% of BBA and BAc respectively believed that the degree was not suitable.

Thus on the whole, although 7 out of 10 BBA, who completed in 1981 or 1982, thought the degree was acceptable (compared to 9 out of 10 BAc), a larger proportion did not view the degree as being fit. There was no significant difference for the 1983/84 and 1985/86 groups. The reasons for this discrepancy were not clear. One would have expected that the later BAc graduates would have found the programmes more suitable since they were following a new BAc programme. One explanation could be that earlier BAc graduates may have experienced the commonalty and the simplicity of transferring their skills among various sizes of firms.

But BBA graduates may have found it more difficult to change from larger organisations for which their skills were most suitable to smaller ones. This supposition was further strengthened by the finding that when type of degree was held constant, although the significance levels were not significant for BBA and BAc, the probe value was very close to 1 (0.9130) for the former while it was 0.2375 for the later group. These prob values tended to indicate that BBA respondents graduating in 1981/82, 1983/84 and 1985/86 were very similar in their

responses. But the opposite was true for BAc graduates who tended to differ from one graduating group to another.

The proposition that BBA's may have found it more difficult to fit in the small firm was further given more weight when their additional rich comments were considered. They indicated that graduates felt they were trained to fit in the shoes of executives of larger organisations as Turok commented above. Other trained comments also revealed why 1 out of 5 felt that the degrees were not suitable to work in small firms. Refer to section 8.3.4 for a full discussion.

Table 8.5 INADEQUACY OF DEGREE FOR JOB IN SMALL BUSINESS BY GRADUATE'S TYPE OF SBIS DEGREE

DEGREE IS INADEQUATE	TYPE OF DEGREE		
	BUSINESS ADMIN. (B.A)	ACCOUNTANCY (BAc)	
	No. Row % Col. %	No. Row % Col. %	Total No. Row. %
AGREE	4 21.1 6.0	15 78.9 8.0	19 7.5
NOT SURE	12 46.2 17.9	14 53.8 7.5	26 10.2
DISAGREE	51 24.4 76.1	158 75.6 84.5	209 82.3
Column Total No. Column Total %	67 26.4	187 73.6	254 100.0

X^2 = 6; P = 0.05; Cramer's V = 0.15; No. Missing = 0

8.3.3. COMPARISON OF STUDENTS' AND GRADUATES' ATTITUDES TOWARDS THE ADEQUACY OF BBIS DEGREES FOR WORKING IN SMALL BUSINESS

In order to find out whether there were any statistical differences between students' and graduates' responses, a comparison was made using chi-square analysis. Data was combined then broken down.

The results confirmed that there was an overall majority of 81% of students and graduates who disagreed with the statement hypothesising that the degrees were not good for working in small business. A smaller proportion of 9% agreed to the statement while about 10% were not sure. Thus findings again showed some elements of dissatisfaction with the degrees. There were however no significant differences between the two groups (table 8.6).

Table 8.6 INADEQUACY OF DEGREE FOR JOB IN SMALL BUSINESS BY UNIVERSITY RESPONDENT'S CATEGORY

DEGREE IS INADEQUATE	UNIVERSITY RESPONDENT'S CATEGORY		
	STUDENT No. Row % Col. %	GRADUATE No. Row % Col. %	Total No. Row. %
AGREE	20 51.3 11.0 4.6	19 48.7 7.5 4.4	39 9.0
NOT SURE	16 38.1 8.8 3.7	26 61.9 10.2 6.0	42 9.7
DISAGREE	145 41.0 80.1 33.3	209 59.0 82.3 48.0	354 81.4
Column Total No. Column Total %	181 41.6	254 58.4	435 100.0

X^2 = 2; P = 0.4; Cramer's V = 0.06; No. Missing = 0

8.3.4. REASONS FOR SOME NEGATIVE ATTITUDES TOWARDS ADEQUACY OF SBIS DEGREES FOR WORKING IN SMALL FIRMS

This section looks at some of the explanations why more BBA graduates of 1981/82 thought that the degree was unacceptable to work in small firms. This was basically attributed to the nature of the degree programmes which aimed at producing highly expectant graduates to occupy executive positions. It also provided some reasons why there was a consistent 1 in 5 persons who thought the degree was not suitable.

Statements from the discussions in subsequent sections, which were transformed into statistical data in order to have an idea of the trend of arguments, also qualified that the SBIS degrees were generally suitable for working in small businesses. But about 1 out of 5 felt they were not suitable. A few references to additional comments adopting content analysis by graduates will clarify why a small proportion thought that SBIS degrees were not suitable.

There were basically three schools of thought about reasons why many graduates do not work in small firms:

1) SBIS training structures;

2) intrinsic reasons;

3) small business owners do not want graduates.

The first view was therefore that the blame should be put squarely on the school and its teaching material which emphasise the formal large organisation structures, arousing high expectations and ambitions of achieving high status among

graduates. This ultimately groomed and encouraged them to join large firms. Kapengwe, a 1983 graduate, then a branch manager with the United Bus Company of Zambia commented as follows:

> SBIS courses have a bias towards the working environment of a large firm possibly because of the over-reliance on American teaching material where the large corporation is the accepted model. Hence graduates are framed to fit in an established organisation with preconceived theoretical organisational structures. The feeling of belonging to something big is imbued during the learning process.

Angson, a 1985 graduate, a trainee accountant who was studying in London, who commented on the discrepancies between the theoretical approach and the industry realities, also shared his view:

> In my opinion, it is much easier to work in a large firm with the knowledge gained from SBIS courses [than in a small firm as these courses] are not adequate.

Nakasa, a 1983 graduate referred to in the opening remarks on the adequacy of degrees, then an operations Accountant, appreciated the courses which provided invaluable knowledge but thought the approach

> seems to make the student leave university with high expectations such as occupying top managerial positions; for example the business (corporate) policy course.

The second view was more explicit. Most graduates were not working in small firms due to intrinsic reasons. These were not seen as rewarding compared to large firms. This was expressed by a 1981 graduate who was then a commercial and Industrial Secretary in one of the District Councils on the Copperbelt. He put it this way:

> Normally, the type of managerial style that would be applicable to small scale business is that of close supervision, less or no room for initiative and security. But if you join such an organisation at a managerial level, then you find your job challenging and would derive job satisfaction through making and employing independent ideas

Mushota, a 1988 graduate, then a trainee accountant also shared similar views about graduates' fears in joining small firms:

> because they do not provide the necessary security...are in continuous financial problems and lending policies of financial institutions do not favour these businesses. To the contrary, most SBIS graduates seek employment opportunities in large, mostly private firms because of their financial strength. [They] provide security ...and can easily finance training programmes that the graduate may wish to pursue.

The third view was that some graduates were very willing to work in small firms. But the owners were not interested in recruiting graduates. Thus although most graduates were not working in small firms, they were positive about working in small firms as Nkole, a cost accountant who talked about the "death of knowledge among organisations" argued:

> smaller firms themselves happen not to have ...much interest in recruiting SBIS graduands [who] would actually feel grateful to join the smaller firms.

8.4. ATTITUDES TOWARDS ADEQUACY OF SBIS DEGREES FOR WORKING IN LARGE ORGANISATIONS

The overall results showed that the greatest majority of about 82% of students and 76% of graduates felt they were well prepared to take up jobs in large businesses.

8.4.1. STUDENTS' ATTITUDES TOWARDS ADEQUACY OF SBIS DEGREES FOR WORKING IN LARGE BUSINESS

The greatest majority of 82% of the students agreed to a statement that the SBIS degrees were adequate for employment in large firm. This compared favourably with the 80% who felt that the degree was adequate for preparing them for jobs in small

firms. But 8% disagreed while 9% were not sure. Thus a total of 17% only were not positive (see table 8.7).

When analysis was broken down to sex, type of degree aspired for and year of study, there were no significant differences regarding the suitability of the degree for a job in a large business. The same findings were obtained when sex, type of desired degree and year of study were held constant to determine any effects on the other variables.

Table 8.7 ADEQUACY OF DEGREE TO WORK IN LARGE BUSINESS BY STUDENT'S PREFERRED TYPE OF DEGREE

DEGREE IS ADEQUATE	TYPE OF DEGREE		
	BUSINESS ADMIN. (B.A)	ACCOUNTANCY (BAc)	
	No. Row % Col. %	No. Row % Col. %	Total No. Row. %
DISAGREE	2 13.3 4.2	13 86.7 9.8	15 8.3
NOT SURE	7 41.2 14.6	10 58.8 7.5	17 9.4
AGREE	39 26.2 81.3	110 73.8 82.7	149 82.3
Column Total No. Column Total %	48 26.5	133 73.5	181 100.0

X^2 = 3; P = 0.20; Cramer's V = 0.13; No. Missing = 0

8.4.2. GRADUATES' [illegible] TOWARDS ADEQUACY OF SBIS DEGREES FOR WORKING IN LARGE BUSINESS

Expressing their views on the suitability of SBIS degree in preparing them to take up jobs in large firms, a great proportion of 78% of the graduates believed that the degrees were adequate. This was however a slightly lower proportion compared to 82% for the students. About 18% denied while 5% were not sure. This tended to show more dissent by graduates than students whose percentages were 8% and 9% for refusal and not certain respectively.

When analysis was broken down further, it was discovered that there were no significant differences between BBA and BAc graduates in their views. This was also true when year of study was considered. But a significant difference at prob value of 0.0072 was found between males and females. In particular, more males accounting for 80% were satisfied with the degree compared to their counterparts whose proportion was 60%. About 28% of females were not happy with the degree compared to 17% males. Again a larger proportion of 12% of females compared to 3% of males were not sure (see table 8.8).

When the results were further broken down by holding type of degree constant, it was revealed that the difference between males and females shown above existed among BBA graduates only. Specifically, less females accounting for 50% were satisfied with the degree compared to 88% males. But 30% females rejected the suitability of the degree compared to 11% males. About 20% and 2% females and males were not sure respectively. These results were

significant 0.0061 prob value. This was a surprising finding. The reasons why female BBA graduates felt the degree was not suitable could not easily be speculated.

Consideration of type of degree and year of study did not reveal any significant differences. The same conclusion was arrived at when sex or year of study were held constant and the effects of the other two variables investigated.

Results therefore showed that in general respondents were quite satisfied with the level of education received in preparing them to work in large firms. However, more graduates than students were dissatisfied. In particular female BBA graduates were the least contented.

Table 8.8 ADEQUACY OF DEGREE TO WORK IN LARGE BUSINESS BY GRADUATE'S SEX

DEGREE IS ADEQUATE	GRADUATE'S SEX		
	MALE No. Row % Col. %	FEMALE No. Row % Col. %	Total No. Row. %
DISAGREE	36 75.0 17.0	12 25.0 28.6	48 18.9
NOT SURE	7 58.3 3.3	5 41.7 11.9	12 4.7
AGREE	169 87.1 79.7	25 12.9 59.5	194 76.4
Column Total No. Column Total %	212 83.5	42 16.5	254 100.0

X^2 = 10; P = 0.0072; Cramer's V = 0.20; No. Missing = 0

8.4.3 COMPARISON OF STUDENTS' AND GRADUATES' ATTITUDES TOWARDS THE ADEQUACY OF SBIS DEGREES FOR WORKING IN LARGE FIRMS

It has been shown that more graduates than students appeared to be discontented with the knowledge acquired at SBIS. This section sought to test whether the differences between 82% of students and 78% of graduates who were happy with the degree, and the 8% and 19% who were not pleased respectively were large enough. Results confirmed that there was a statistical significance of 0.0023. In spite of these discrepancies, an overall satisfaction of 79% was recorded against the 15% who were displeased and about 7% who were uncertain (see table 8.9).

Table 8.9 ADEQUACY OF DEGREE TO WORK IN LARGE BUSINESS BY UNIVERSITY RESPONDENT'S CATEGORY

DEGREE IS ADEQUATE	UNIVERSITY RESPONDENT'S CATEGORY		
	STUDENT No. Row % Col. %	GRADUATE No. Row % Col. %	Total No. Row. %
DISAGREE	15 23.8 8.3	48 76.2 18.9	63 14.5
NOT SURE	17 58.6 9.4	12 41.4 4.7	29 6.7
AGREE	149 43.4 82.3	194 56.6 76.4	343 78.9
Column Total No. Column Total %	181 41.6	254 58.4	435 100

X^2 = 12; P = 0.0023; Cramer's V = 0.17; No. Missing = 0

The reasons for the differences between the two groups could have been due to the experiences graduates had encountered in the field as opposed to the classroom expectations of the opportunities available on the job market. Graduates' disillusions were ably demonstrated in their rich qualitative comments on the weaknesses of SBIS degrees and non acceptability of the BAc degree by employers. These were transformed in quantity data and frequencies carried out in order to have an idea of the pattern of their submissions. The main method of analysis used was content analysis. These will soon be picked up for detailed discussion in sections 8.4 and 8.5 of this chapter.

However, before doing so, it is pertinent to complete the third and fourth stages of this analysis, which deal with the overall suitability of the degrees for the three areas introduced at the beginning of the chapter, taken together.

8.3 OVERALL ATTITUDES ON THE SUITABILITY OF SBIS DEGREES

It will be recalled that analysis of overall attitudes called for combined analysis of the suitability of SBIS degrees in providing adequate training in all the three areas of starting business, working in a small firm and working in a large firm taken together. Students and graduates were first analysed separately in the third stage and then a comparison of the two groups was made in the fourth stage where pared analysis of two of the three areas at a time was carried out.

This meant that in the fourth stage the first step was determining the appropriateness of the degrees for both starting business and working in a small business. In the second step analysis was made on the degrees' fitness for both starting business and working in a large firm. Finally in the third step, concentration shifted to the rightness of the degrees for both working in small business as well as working in large firms. The fourth stage called for the same analysis following the three steps outlined above but by comparing students and graduates. The aim of overall analysis was to determine whether students and graduates felt the degrees adequately prepared them in all the three areas of starting business, working in small firm and working in large firms.

8.5.1. SUITABILITY OF DEGREES FOR BOTH STARTING BUSINESS AND WORKING IN A SMALL BUSINESS

When students' views regarding the appropriateness of the degrees for both starting a business and working in a small firm were considered, the differences between those who agreed or disagreed were apparent. About 45% of those agreeing that the degrees were unsuitable for starting business also agreed that they were not good for working in small businesses. But about 65% had positive attitudes to both statements. Further a large proportion of 38% were not sure. In other words, about 7 out of 10 people thought the degrees were suitable while almost 1 out 2 persons thought that the degrees were not appropriate and 2 out of 5 were not sure. The differences were significant at 0.0089 (see table 8.10). These findings meant that although students were generally positive about the suitability of the degrees for

providing knowledge in either starting business or working in small business, they however thought that the degrees were not suitable for imparting knowledge adequately in both areas considered together.

Graduates responses were also analysed in a similar manner. The results revealed a significant difference of 0.000 of those agreeing or disagreeing to both statements (see table 8.11). The majority of 90% agreed that the degrees were inadequate while 70% disagreed to the statements, meaning that they were suitable. However, about 54% or 1 out of 2 were not sure. The implication of this finding was that more graduates were negative about the suitability of degrees. The ratios were 7 out of 10 in favour and 9 out of 10 against. These findings again showed that although the degrees were on the whole acceptable, they were not capable of imparting complete knowledge in both areas at the same time.

When compared to students, these results showed that more graduates than students felt that the degrees were not suitable for both starting business and working in small business since the ratios of students were 7 out of 10 in favour and 1 out of 2 against.

In order to determine whether such apparent differences between those who were positive and negative from the entire sample of students and graduates were significant, the two groups were combined. Then chi-square analysis was applied. Results showed that there was a significant difference at 0.000 in the combined sample regarding the appropriateness of the degrees for

both starting business and working in a small business (see table 8.12). Specifically 67% of both students and graduates agreed to both statements that the degrees were not appropriate for both starting businesses and for working in small firms. A great percentage of 46% were not sure to both statements and 88% disagreed to both statements. Thus the overall analysis confirmed the separate analysis. This showed that close to 7 out of 10 respondents were negative, while the same number was positive but a smaller number of 1 out of 2 were not certain.

Thus these findings tended to support the view that although the degrees were acceptable, they did not properly equip graduates with the skills necessary for starting business and working in a small business.

Table 8.10 INADEQUACY OF DEGREE FOR STUDENTS TO START BUSINESS BY INADEQUACY OF DEGREE FOR JOB IN SMALL BUSINESS

DEGREE IS INADEQUATE TO START BUSINESS	DEGREE IS INADEQUATE FOR JOB IN SMALL BUSINESS			
	AGREE	NOT SURE	DISAGREE	
	No.	No.	No.	Total
	Row %	Row %	Row %	No.
	Col. %	Col. %	Col.%	Row. %
AGREE	9	5	28	42
	21.4	11.9	66.7	23.2
	45.0	31.3	19.3	
NOT SURE	3	6	23	32
	9.4	18.8	71.9	17.7
	15.0	37.5	15.9	
DISAGREE	8	5	94	107
	7.5	4.7	87.9	59.1
	40.0	31.3	64.8	
Column Total No.	20	16	145	181
Column Total %	11.0	8.8	80.1	100.0

I^2 = 14; P = 0.0007; Cramer's V = 0.19;
No. Missing = 0

Table 8.11 INADEQUACY OF DEGREE FOR GRADUATES TO START BUSINESS BY INADEQUACY OF DEGREE FOR JOB IN SMALL BUSINESS

DEGREE IS INADEQUATE TO START BUSIN.	DEGREE IS INADEQUATE FOR JOB IN SMALL BUSINESS			
	AGREE	NOT SURE	DISAGREE	
	No.	No.	No.	Total
	Row %	Row %	Row %	No.
	Col. %	Col. %	Col.%	Row. %
AGREE	17	5	42	64
	26.6	7.8	65.6	25.2
	89.5	19.2	20.1	
NOT SURE	1	14	21	36
	2.8	38.9	58.3	14.2
	5.3	53.8	10.0	
DISAGREE	1	7	146	154
	.6	4.5	94.8	60.6
	5.3	26.9	69.9	
Column Total No.	19	26	209	254
Column Total %	7.5	10.2	82.3	100.0

I^2 = 83; P = 0.0000; Cramer's V = 0.41;
No. Missing = 0

Table 8.12 INADEQUACY OF DEGREE FOR BOTH STUDENTS AND GRADUATES TO START BUSINESS BY INADEQUACY OF DEGREE FOR JOB IN SMALL BUS.

DEGREE IS INADEQUATE TO START BUSINESS	DEGREE IS INADEQUATE FOR JOB IN SMALL BUSINESS			
	AGREE No. Row % Col. %	NOT SURE No. Row % Col. %	DISAGREE No. Row % Col.%	Total No. Row. %
AGREE	26 24.5 66.7	10 9.4 23.8	70 66.0 19.8	106 24.4
NOT SURE	4 5.9 10.3	20 29.4 47.6	44 64.7 12.4	68 15.6
DISAGREE	9 3.4 23.1	12 4.6 28.6	240 92.0 67.8	261 60.0
Column Total No.	39	42	354	435
Column Total %	9.0	9.7	81.4	100.0

X^2 = 82; P = 0.0000; Cramer's V = 0.40; No. Missing = 0

8.5.2 SUITABILITY OF DEGREES FOR BOTH STARTING BUSINESS AND WORKING IN A LARGE BUSINESS

Separate analysis on students' views on the suitability of degrees for both starting business and working in large business was carried out. The findings showed that about 33% of students did not accept that the degrees were adequate. But 59% were definite. A smaller proportion of about 23% were not sure to both statements. These differences among those who were positive, negative or not sure to both statements were not statistically significant. (see table 8.13). The interpretation must be that since there were no significant differences between favourable and unfavourable comments, the two groups were similar. Hence, there was no evidence that students had positive or negative

attitudes on the suitability of the degrees for both starting business and working in large firms.

When graduates' attitudes on both issues of starting a business and working in a large firm were considered, there was no statistical difference. About 25% were negative, another 25% were not sure and 59% were not positive. This implied that when the two issues were considered together, about 6 out 10 thought that the degrees were suitable for both starting a business and working in a large firm. But about 1 out of 4 were negative and the same number were not sure. Since there was no statistical difference among the three categories, there was no evidence to support that those with positive attitudes were different from those with negative attitudes. Therefore there was no support for the suitability of the degrees for both starting business and working in small firms.

When students and graduates views were combined and considered together findings were similar to those obtained when separate analysis were done as above. A majority of 59% had positive views on the suitability of the degrees for both starting business and working in large firms. But 27% had negative views to both statements while 24% were not sure. There were no significant difference between those agreeing and disagreeing to both statements. The interpretation was that close to 3 out of 5 people had favourable views to both while 1 out of 3 thought they were not appropriate and 1 out of 4 had no opinion at all. It was therefore clear that the three groups (favourable, unfavourable and uncertain) were about similar. Hence there was no support that the degrees were suitable for both starting business and working in large firms.

Table 8.13 INADEQUACY OF DEGREE FOR STUDENTS TO START BUSINESS BY ADEQUACY OF DEGREE TO WORK IN LARGE BUSINESS

DEGREE IS INADEQUATE TO START BUSINESS	DEGREE IS ADEQUATE FOR JOB IN LARGE BUSINESS			
	DISAGREE	NOT SURE	AGREE	
	No. Row % Col. %	No. Row % Col. %	No. Row % Col.%	Total No. Row. %
AGREE	5 11.9 33.3	2 4.8 11.8	35 83.3 23.5	42 23.2
NOT SURE	2 6.3 13.3	4 12.5 23.5	26 81.3 17.4	32 17.7
DISAGREE	8 7.5 53.3	11 10.3 64.7	88 82.2 59.1	107 59.1
Column Total No.	15	17	149	181
Column Total %	8.3	9.4	82.3	100.0

X^2 = 2; P = 0.68; Cramer's V = 0.08; No. Missing = 0

8.5.3. SUITABILITY OF DEGREES FOR BOTH WORKING IN SMALL BUSINESS AND WORKING IN LARGE BUSINESS

As in the previous two analyses, students' attitudes towards the suitability of the degrees for both working in small business and large business was analysed separately first. Results showed that a majority of 81% were positive about the suitability of the degrees. A smaller proportion of 20% were negative and 29% were not sure. These differences were significant at probe value of 0.0112. Thus the conclusion must be that students thought the degrees were adequate for working in small and large firms since 4 out of 5 thought so while 1 out of 5 had negative attitudes and close to 3 out 10 were uncertain.

Analysis of graduates' responses separately on the same issue revealed that these were similar to students', since 81% were positive. Only a small minority of 4% were negative to both suggestions while 33% were not sure. The results were statistically significant at 0.0177 probe value.

Judging from the two high proportions of 81% in separate analysis, it should follow that combined results for both students' and graduates' should result in statistically significant differences. The probe value was 0.0004. The interpretation was that the greatest majority of 4 out of 5 students and graduates believed that the degrees were right for both working in small and large firms.

8.6. CONCLUSIONS ON SUITABILITY OF BBIS DEGREES

Empirical evidence regarding the appropriateness of the BBA and BAc degrees for starting business, working in small firms and working in large firms revealed that:

1) On the whole, the two degrees were generally acceptable by both students and graduates for starting business or working in a small firm or working a large firm. Everything was however not rosy on the suitability of the As a consistent 2 out of 5 persons were not pleased with the degrees. This was particularly true with the graduates.

2) The degrees were however found most appropriate for working in large businesses.

3) There was no statistical difference between students' and graduates' views on the rightness of degrees for starting business and working in small firms. But there was a difference regarding suitability for employment in large firms.

4) The degrees were found to be very suitable for both working in small and large firms taken together.

5) They were, however, not suitable for starting business and working in small firms, or starting business and working in large firms. In other words they were not very appropriate for starting business.

These findings should not be very surprising if it is considered that BBA and BAc degrees were general rather than specialised degrees for starting business, working in small business or working in large business. But evidence and comments had however shown that the degrees were more suitable for working in large business than starting a business or working in small business.

Findings therefore showed that there were discontented respondents regarding the suitability of the degrees. All was not well. The greatest disillusions existed among graduates who may have had bitter experiences. These experiences which were revealed in rich qualitative data are now picked up for detailed discussion.

8.7 GENERAL WEAKNESSES OF SBIS DEGREE PROGRAMMES

Graduates were asked to provide any comments regarding their Experience in the field in reference to SBIS degrees. These were quantified and frequencies carried out in order to have some idea on the pattern of responses. The main method of analysis however remained content analysis. As explained in the introduction, full analysis of graduates' comments was decided upon after reading through respondents' complaints including letters addressed to the researcher. These were very critical of the apparent emphasis on the small firm at the expense of non acceptability of the BAc degree.

The main reason for the change of direction was in consideration of one of the original objectives of the research study. This was: finding out the extent to which SBIS degrees were found useful by graduates in the field. It was therefore thought inclusion of full discussion of views their on SBIS degrees would not be a digression. In fact several questions regarding graduates' evaluation of SBIS courses had already been included in the questionnaire to help in determining whether graduates had found them beneficial in the field. Graduates had also been asked to indicate which courses they felt needed to have been included in their programmes (i.e. those they wished they had done).

It was in this light that expanding the discussion to graduates own experiences as opposed to predetermined pattern of the researcher was not found objectionable. In fact it was realised that this would provide great insight in graduates'

problems and offer further opportunities for further research. The only constraint anticipated was time as content analysis was expected to be very demanding and lengthy.

It has been shown above that a great percentage of 82% of 181 students and 76% of 254 graduates believed that the SBIS degrees were adequate for a job in large businesses. It has also been revealed that 80% of students and 82% of the graduates thought that the degree was adequate for a job in a small business. However a smaller percentage of 59% of students and 61% of graduates stated that the degree prepared them adequately to start their own businesses.

This therefore showed that between 20% and 40% were not positive about the degree. It was further testified that the degree did not adequately impart knowledge in the three areas to the same level. The least beneficial having been starting business. The most favourable area having been working in a large business. It was also disclosed that the most displeased group were graduates. This subsection looks at the root causes of some of these negative views among graduates.

A total of 110 out of 254 graduates (43%) offered various additional comments when asked to do so on any aspect of the questionnaire if they so desired. These were summarised in the most appropriate categories. Of course not every respondent who offered views did so on the same issues. Hence on some issues there were fewer than the total of 110 respondents. Further, there was some restriction on the number of acceptable responses to a particular issue as only the first response to a particular

topic or main idea presented on the same issue or variable was accepted for inclusion in the analysis. The others were ignored in order to avoid multiple responses. Thus in a sense, responses to some issues where there may have been more comments were under represented.

Respondents comments were included in the analysis as qualitative data, to enrich the findings on SBIS degrees and courses offered by the school. The data was also transformed into quantitative data, not for purposed of statistical testing, but to obtain frequencies to highlight the pattern of responses.

In general, 82% of the 68 graduates commenting on the issue of the degrees stated that the degrees were adequate for a job in small or large businesses. Out of the 81 who commented on the strengths of the SBIS programmes, 60 (74%) alluded its broadness as one of its strengths since that enabled graduates to fit in any sector of the economy. In fact 25% said that courses were of high standards comparable to overseas university programmes. However, 74% (39 out of 53) who shared their experiences on the degrees said that the Bachelor of Accountancy degree (BAc) had not been accepted by employers.

The reasons for non acceptance of the BAc degree are discussed in the next section which deals with the non-acceptability of the accounting degree. But in this section attention is focused on what the same respondents revealed as the general weaknesses of both the Bachelor of Business Administration degree programme (BBA) and the Bachelor of Accountancy degree programme (BAc).

These weaknesses of the SBIS programmes that were identified were summarised as (see table 8.14)

a) Lack of well qualified, professional experienced lecturers or too frequent changes of lecturers (7%);

b) Lack of consistent programmes;

c) Superficial coverage of course contents (20%);

d) Too academic or theoretical approach to course offerings (33%); e) Irrelevant or outdated courses;

f) Lack of practical industrial experience by students (18%)

g) Lack of contact with the business community (33%).

Among the first and second recommendations were (see table 8.15):

a) The need to marry theory with practice (30%)

b) Interaction with the business community (19%)

c) The need to expose students to practical experience (14%).

Each of these points will now be analysed based on content analysis.

Table 8.14 GENERAL WEAKNESSES OF SBIS DEGREE PROGRAMMES

	No.	%	Valid %	Cum %
Lack of industrial experience	11	4	18	18
Shallow content coverage	12	5	20	38
Lack of consistent standard	1	0	2	39
Obsolete/ academic courses	20	8	33	72
Unqualified/ inexperienced lecturers	4	2	7	79
Lack of close contact with business community	10	4	16	95
Other	3	1	5	100
No Comment	193	76	MISSING	
TOTAL	254	100	100	

Table 8.15 GRADUATES' FIRST RECOMMENDATION TO SBIS

	No.	%	Valid %	Cum %
Interact with business community	14	6	19	19
Co-ordinate with professinal bodies	9	4	12	31
Expose students with industrial experience	10	4	14	45
Offer more specialised BBA	4	2	5	50
Offer accounting standards	7	3	10	60
Marry theory with practice	22	9	30	89
Get competent accounting lecturers	3	1	4	93
Other	5	2	7	100
No Comment	180	71	MISSING	
TOTAL	254	100	100	

8.7.1. LACK OF WELL QUALIFIED EXPERIENCED LECTURERS

Lack of well qualified, professional experienced lecturers or too frequent changes of lecturers was one of the complaints though not common, having been mentioned by 4 individuals (7%) of those who commented. The numbers of respondents and the corresponding percentages are misrepresented since one comment only per person per variable was accepted (except for recommendations, two were accepted). Reference to occurrences at the University, for example, shows that since its inauguration, at least three boycotts of classes connected with "incompetence and/or misplacement of lecturers" have taken place. Refer to exhibit 8A5 for a full text of the Registrar's memorandum of the 23rd January, 1985 when all university students on the campus boycotted classes on 21st and 22nd, demanding the removal of 7 lecturers (4 from SBIS, 3 from School of Environmental Studies). In SBIS, the courses involved included BS 472 (sales management) and BS 422 (investment management).

In this study, respondents argued that unqualified staff resulted in poor teaching while too frequent changes of these led to too frequent course changes and offerings as each new lecturer changed courses at his whims. This again ultimately resulted in delivered material being below expectations. Patrick, a 1983 graduate, an assistant accountant studying in London at the time of study expressed very strong negative sentiments about the quality of the staff in the school when he said:

> course content looked and still look impressive. It was/ is what any business person would love. But then.....we lacked good teachers to impart the knowledge. In the end certain courses are "paper courses" which are just figment of once having been to UNZA. I am thankful that I was able to have this chance to be trained outside the country. But then foreign knowledge [is] very unsuitable to local conditions.

Phiri, a 1985 graduate, then a trainee Accountant, who was studying in London for ACCA also expressed similar views:

> ...I feel that the "quality" of the staff especially in the ACCOUNTING DEPARTMENT needs to be improved. The ideal situation would be to have lecturers with masters or PhD [degree] accounting plus professional qualifications like ACCA or ICMA. There is also a lack of "commitment" on [the] part of some members of staff as manifested in just scratching course surfaces without bothering to impart proper knowledge as was the case in BS 423: INVESTMENT MANAGEMENT [during] 1984/85 academic year. A small lecturer to student ratio would result in a more personal attention of lecturers in student academic problems.

McLaren, a 1985 graduate, an assistant accountant at the time of the study then called upon the university:

> .. not only [to employ] academicians...[but also] to attract and retain professional men at [the copperbelt university]. This is long overdue.

In addition to poor staff, there were complaints on too frequent changes of lecturers. Lewanika, a 1983 graduate, then an assistant accountant, studying in London at Buckingham university argued:

> Lecturers are changed too often as a result the programme is not of consistent standards....

8.7.2. LACK OF CONSISTENT PROGRAMMES

The second area of concern by graduates was what was referred to as frequent course programme changes at the whims of educated western lecturers. It was felt that accommodating pressures from such influential persons ruined programmes since their duration at SBIS was short. They called upon the Dean of the School to resist against such pressures to preserve the dignity of the school. They thought that changes should be made only when it was absolutely necessary and after long intervals. Bill, a 1988 graduate who was not yet employed elaborated on this lack of consistency in the degree programmes when he said that he was

> particularly concerned by the fact that the school's programme is not consistent. Almost every time a new "educated" lecturer from the USA or U.K. comes to UNZAMDO, the whole programme is changed to accommodate this "learned" lecturer's views .... Programmes should be standardised but reviewed only when it becomes necessary. The school needs not a "yes" man type of Dean [but one] who is capable of withstanding pressure from very "educated" lecturers..., able to explain issues which affect students' future welfare e.g. the ZICA issue [Zambia Institute of Certified Accountants].

8.7.3 SUPERFICIAL COVERAGE OF COURSE CONTENTS

The third major problem experienced by graduates, which was related to the last two, was what they termed as "superficial coverage of courses." About 12 persons or 20% of those who commented claimed that lecturers merely scratched the surface of the course contents which looked impressive in the course outlines. This was partly blamed on poor quality of staff or lack of commitment by some lecturers. To support their claims graduates narrated their experiences and observations. Joseph, a

1984 graduate, who was an assistant accountant at the time of the study strongly stated:

> The presentation in most courses ... are of sub-university level. Thus [resulting in] the production of under baked graduates, who when brought under the microscope of ACCA/ ICMA wither. For this I squarely blame the school for making the student believe he is of international standard. Yet most firms...regard him as raw material for the professional training phase. [Many firms such as] Deloittes and Haskins will keep you in the student accountant phase until [you obtain] ACCA. But when you try to rely on SBIS material in making your preparations for these exams, you discover [that] most lecturers were just scratching on the surface despite a good course outline.

This view of shallow coverage in accounting courses compared to the professional qualification, was not an isolated case. Moses, a 1983 graduate, then a senior accountant in charge of preparing a division's annual budget, monitoring it and supervising three accountants stated:

> ... the SBIS degree course is good, but for lack of concentration [as in some courses]. Much as one would claim to have covered [courses] such as management accounting and qualitative analysis in the SBIS course, the content on the professional course is much more detailed.

It was felt that the scratching of courses on the surface was partly influenced by too much emphasis on passing examinations to which such courses were oriented instead of teaching for the purpose of imparting knowledge. Thus the end result in some courses was delivering too little material. Anne, a 1983 graduate, then a senior assistant accountant, studying in London at the time of the study said that the courses were right

> except they do not cover sufficient areas of the syllabus. They tend to be too exam oriented i.e. simply prepare students for the exam .... It would be better if the courses were taught thoroughly not only for exam purposes but for knowledge to be used in the industry.

Peter, a 1985 graduate, then a trainee accountant, also expressed similar fears on the emphasis of teaching for passing exams:

> I do appreciate the course contents in most of the subjects offered at the university...though...some lecturers... demand *too little mark* not even 1/3 of the course contents while others demand *too much*... There is much emphasis on passing exams rather than understanding. That is why students spend much time on parrot work instead of understanding whatever is learnt.

8.7.4 TOO THEORETICAL APPROACH TO COURSES

In addition to superficial coverage, another source of concern identified by 20 persons or 33% of those who commented on this issue was the discrepancy between text book theories and practical approaches in the Zambian environment. They further claimed that some courses were obsolete. The former was sometimes blamed on four factors. First, lack of proper teaching techniques of marrying theory with practical realities, was seen as a major constraint. Second, dependence on western text books, appropriate for different environments, was seen by others as the main cause of the discrepancies in expectations while at university and experiences encountered after starting employment. Third, the theoretical approach was also associated with lack of student exposure to the practical world through industrial orientations, tours and vocational employment even without payment. Embarking on this route was seen as a way of narrowing the gap between abstract courses and realities in the industry. This point is taken up in section 8.7.6. Fourth, theoretical approach was seen as leading to teaching courses which were either irrelevant or obsolete. Obsolete courses issue is taken up in the next section.

Angson, a 1985 graduate then a trainee accountant studying for ACCA in London stated as follows on the theoretical approach and foreign textbooks versus industrial experiences:

> The courses offered are too theoretical and academic in nature rather than practical. From my own experience, I discovered that the environment one visualises while still at the campus and the actual business environment in the Zambian industries do not reconcile .... For example in almost all management courses we were taught about motivation theory x and y etc., but when you get into the industry environment, you realise that these things do not exist in the Zambian environment. Even where some people are aware of [them] these play a minor role in the management process. Anyway, I cannot see how the situation will change given the dependence on foreign books which seem to talk about theories which make academic sense, but which are practically nonsense in the Zambian situation.

One short coming of this study was that it was not possible to get views of employers on their experiences with graduates. Therefore there was a great possibility that graduates' views regarding their experiences in the job market may have been biased in self defence. A general manager of Tata Zambia Ltd., in the businessmen questionnaire, however agreed with the notion of producing theoretically oriented graduates. But he also mentioned their high expectations, which students had also noted when commenting on the preparations for taking up jobs in large firms. He observed:

> University graduates are too theoretical not practical oriented. They also do expect too much in a short period of time...classroom courses should be given by people who have worked in business before. Too much of academics does not help a person become a good entrepreneur.

In order to emphasize their points on the theoretical approach, graduates narrated their experiences in particular courses while at the University and their experiences in industry. Five courses were heavily criticised for their

theoretical approach without taking into account the practical side. These were Computers - BS 140 a first year course, Microeconomics - BS 110, Macroeconomics - BS 210, International Trade - BS 472 and Taxation.

Commenting on the importance of computer in industry today and the lack of access to it while on campus, Mutuna, a 1986 graduate, then a bank clerk, called for realism in teaching some courses. He observed:

> In spite of having studied computers in 3rd year, I have never even seen a computer, let alone known how to operate.... There is a need for more teaching aids.

In order to drive his point home and lend his support to Mutuna, Joseph, a 1984 graduate then an assistant accountant strongly felt:

> ...computers is another course that was handled superficially, as it seemed to have been an introductory course. An accountant of today is supposed to have some understanding of computers and data processing management. But it is a total mockery to even have the subject on the transcript of results as what it connotes....and the actual lectures delivered are poles apart.

Commenting on the theoretical approach to computers, without any practical exposure and the economic realities in the Zambian industry where a computer is an important tool, Edwin, a 1986 graduate then a cost accountant, called upon the University to buy a computer as:

> Most companies are now using computers for everything. We...had a theoretical background of computer programming, but the course needed ...exposing us to one of the computers and [the] use [of] it.... I suggest [purchasing of] a computer so that students who will graduate after us are exposed to it.

A part from computers three economics courses, BS 110 and BS 210 (common to both programmes), and BS 472 (an elective course)

offered in the department of Business Administration, were criticised for their theoretical approach. The first two courses were described as too abstract, too general courses by Mafuta, a 1986 graduate:

> Some subjects [such as] BS 110 and BS 210 also lack the practical approach in that they are general in nature and not specific. We need a BS 110 and BS 210 with the Zambian approach with a comparison henceforth to the international scene.

A fourth year economics course, BS 472 was also criticised for the same reason. Musana, a 1988 graduate said:

> The course content of International Trade and Business leaves much to be desired [which] I realised when I compared with [that of] Anthony Wade Consultants Ltd's International Trade. I can claim to have done International Trade, yet I don't know anything about such things as cargo insurance, export documentation, import and export procedures, methods of payment and the financing of overseas trade to mention a few. [An employer such as] AMI, [Agency Maritime International, Zambia National] Forwarding and Clearing Corporation or Manica Freight]...would undoubtedly [expect a graduate who has done such a course to know about these] at least in theory [but this is] to the contrary.

A similar view of disapproval of the manner of teaching International Trade on a macro level, was expressed by Hamaundu, a 1982 graduate then a management trainee who was studying for masters degree in London when he observed:

> where as the SBIS courses were integrated for one to easily fit in any organisation, I would suggest that ... [the section] covered in foreign trade course [on] purchasing for both foreign and local [be broken down] to the level of a firm.

As regards the taxation course there was a view that it was taught in abstract terms without relating it to the practical side. Mbenkele, a 1983 graduate then a senior assistant accountant, studying in London for example felt:

> The courses being offered should be biased towards the practical aspect of the business... . It would be very helpful if... taxation is dealt with in a bit more detail

and related to the practical side of the business environment. When I did my degree course what we pursued left much to be desired.... Furthermore, courses such as advanced accounting need to be dealt [with] in as much detail as possible.

There was therefore a call by 30% (22 out of 74 commenting) to marry theory with practice in their first recommendation, as shown in table 8.15 above.

8.7.4.1 MOST USEFUL COURSES

It should be emphasised that the courses mentioned above were not seen as useless. But these observations should correctly be viewed as calls for changes in teaching these courses from theoretical to practical approach. It was envisaged that such reorientation would be very beneficial. Some of these courses were in fact very valuable to graduates. This was shown from responses to a different question which asked all graduates to evaluate courses in the light of their industrial experiences by indicating one course they found most valuable. This was done to determine the usefulness of individual SBIS courses to graduates in the field.

Accounting courses were mentioned by 46% (85 out of 187) of all respondents while Business management courses were mentioned by 22% (41). Advanced accounting came out first, having been mentioned by 24% (44 out of 187 responding). Business policy, a common core course to both programmes (offered by the Department of Business Administration came out second with 12%. But it was the first among the management courses while the second was marketing (6%) and micro-macro economics came out third with (4%) (see table 8.16).

When the main courses mentioned were grouped into two major categories of accounting and management courses, as would be expected, the greatest majority of graduates appreciated courses in their own field. For example 49% BBA graduates cherished management courses compared to 12% for BAc graduates. Likewise, 60% of BAc graduates treasured accounting courses compared to 8% for BBA graduates. The ratings for other courses were 43% and 24% for BBA and BAc graduates respectively. Surprisingly, only 4% said all courses were valuable. These differences were significant at 0.0000 prob value (see table 8.17).

When sex was considered, a slightly higher proportion of 52% of females admired accounting courses compared to 44% for males. More males than females (25% and 3%) enjoyed management courses. Proportions for other management or accounting courses were 26% and 45% for males and females respectively. These differences were again significant at 0.0190. Year of graduation was not a determinant in rating the usefulness of courses.

Table 8.16 SBIS COURSE FOUND MOST VALUABLE

	No.	%	Valid %	Cum %
Intermediate Accounting	15	6	9	8
Advanced Accounting	44	17	24	32
Management Accounting	17	7	9	41
Finance Accounting	9	4	5	46
Business Policy	22	9	12	57
Marketing Management	12	5	6	64
Micro / Macro Economics	7	3	4	67
Other courses	54	21	29	96
All courses	7	3	4	100
Did not state	67	26	MISSING	
TOTAL	254	100	100.0	

Table 8.17 MAIN SBIS COURSES FOUND MOST VALUABLE BY GRADUATE'S TYPE OF SBIS DEGREE

MAIN COURSE FOUND LEAST VALUABLE	TYPE OF DEGREE		
	BUSINESS ADMIN. (B.A)	ACCOUNTANCY (BAc)	
	No. Row % Col. %	No. Row % Col. %	Total No. Row. %
ACCOUNTING COURSES	3 3.5 5.9	82 96.5 60.3	85 45.5
MANAGEMENT COURSES	25 61.0 49.0	16 39.0 11.8	41 21.9
OTHER	22 40.7 43.1	32 59.3 23.5	54 28.9
ALL COURSES	1 14.3 2.0	6 85.7 4.4	7 3.7
Column Total No.	51	136	187
Column Total %	27.3	72.7	100.0

X^2 = 53; P = 0.0000; Cramer's V = 0.53; No. Missing = 67

8.7.4.2 DESIRED COURSE

In order to further test the value of courses, a different question asked about a course they did not take that they would like to take if they went to SBIS next week. The most outstanding course aspired for, was marketing management, having been chosen by 39 or 17%. Nevertheless, computer science and international economics (BS472) shared the second position having been preferred by about 8% or 18 persons each.

The main courses mentioned were then grouped into two classifications: management and accounting courses, the two main SBIS programmes. As shown in table 8.18, management courses came out first having been selected by 52% or 117 of the respondents. Since most of the respondents were accounting degree holders, this implied that they felt there was a need to have done more management courses than they did. The importance of computers was again highlighted by these preferences

Table 8.18 MAIN COURSE NOT TAKEN THAT WOULD LIKE TO BY GRADUATE'S TYPE OF SBIS DEGREE

COURSE RESPONDENT WISHED HAD TAKEN	TYPE OF DEGREE		
	BUSINESS ADMIN. (B.A) No. Row % Col. %	ACCOUNTANCY (BAc) No. Row % Col. %	Total No. Row. %
MANAGEMENT COURSES	22 18.8 34.4	95 81.2 58.8	117 51.8
REGULATOTY FRAMEWORK IN ACCOUNTING		9 100.0 5.6	9 4.0
OTHER	38 42.2 59.4	52 57.8 32.1	90 39.8
NONE	4 40.0 6.3	6 60.0 3.7	10 4.4
Column Total No. Column Total %	64 28.3	162 71.7	226 100.0

X^2 = 18; P = 0.0004; Cramer's V = 0.28; No. Missing = 28

It is clear from table 8.18 that the supposition that BAc graduates regretted having not been able to do more management courses was true since the differences between BBA and BAc were significant at 0.0004. Chi-square test revealed that a greater proportion of 59% of BAc graduates compared to 34% of BBA wished to take management courses. A very small proportion of 8% of BAc wanted to take more accounting courses. One of these was regulatory framework in accounting which some had urged SBIS to introduce as will be discussed later. No BBA graduate felt any need to have taken accounting courses. About 59% BBA mentioned other courses while the proportion was 32% for BAc. One interesting finding which clearly came out was the feeling of inadequacy or need for advancement (depending upon which side the reader is on). There was a very small proportion of either BBA or BAc (6% compared to 4%) graduates who felt completely satisfied and did not require any further training who indicated "none".

The differences between males and females were also significant at 0.0030. A greater proportion of 56% of males compared to 31% females wanted to take management courses. But 38% males compared to 51% females preferred other courses. More females than males felt no need for any courses (2% and 14%).

8.7.5 IRRELEVANT OR OUTDATED COURSES

In addition to finding courses to be too theoretical, the fifth criticism listed earlier, it will be recalled, related to courses that were found to be completely irrelevant or outdated. Fears were expressed of having wasted a whole year in such

courses. It was felt that although there might have been some justification when they were initially introduced, such courses needed to be scraped out as they were irrelevant. Joseph, a 1984 graduate who was an assistant accountant, referred to above when discussing the theoretical nature of computers, emphasised:

> Although the intentions might have been good... when the courses were being set up ... the way some courses such as BS 130 were handled, left a lot to be desired.... I wasted a whole year in that class...

Another 1984 graduate Mulembo, who was an assistant accountant (who also commented on introducing accounting standards) offered similar negative comments on the relevance of BS 130. He said:

> BS 130: Business and its environment is one course I considered to be least beneficial. The course may have been well intended, but I feel it was not well-taught in my time.

These pessimistic views regarding some courses in graduates' comments were not isolated, but were reflected in a different question that was addressed to all respondents. In addition to asking all graduates to indicate the most useful course as discussed in the previous section, they were also asked to indicate the <u>least useful</u> course they experienced at SBIS.

A very small proportion of about 13% (34 out of 254 persons) said all were useful. A further 75 representing about 30% of all the respondents did not state. It was difficult to interpret what silence meant. But the rest, 57% pointed out at least one course that was found least valuable.

When the 30% who did not state were excluded from the analysis, Business and its Environment - BS 130, a first year course, came out the worst having been mentioned by a greater

proportion of 22% (40 out of 178 with valid data). Note that BS-130 was the same course Joseph referred to above, rejected for having wasted the whole year. Production Management-BS 360, a third year course also offered in the department of Business Administration programme was listed by 17%. Investment Management BS 422 offered in the Accounting Department came out third. Computer was fourth, having been found inadequate by 6%. The fifth and sixth were Organisational Behaviour (4%) and taxation (3%) respectively. About 22% indicated other courses and 19% with valid data said all courses were useful (see table 8.19).

When compared with the additional comments they offered, it became apparent that at least BS 130 - Business and its environment, BS 360 - Production management and taxation were viewed as the most useless courses by the graduates.

Table 8.19 SBIS COURSE FOUND LEAST VALUABLE

	No.	%	Valid %	Cum %
Business and its Environment	40	16	22	22
Organisation Behaviour	7	3	4	26
Computer (inadequacy)	11	4	6	32
Production Management	30	12	17	49
Taxation	5	2	3	52
Investment Management	12	5	7	60
Other	40	16	22	81
None/all were valuable	34	13	19	100
Did not state	75	30	MISSING	
TOTAL	254	100	100	

In order to find out whether the gloomy picture painted regarding the usefulness of the indicated courses applied to a particular group, i.e. males or females, BBA or BAc graduates or

to year of graduation over a particular period, chi-square analysis was carried out. As before, the most frequently mentioned courses were put into two main categories - accounting and management courses.

The evidence was that there was no bias by gender or type of degree obtained in their negative views since the differences were not significant. Thus the complaints applied across the board on these two variables. However, more complaints were against management courses which had the highest proportion of 49% followed by accounting with 10%, other courses 22% and only about 1 out of 5 (19%) found all courses valuable.

When broken down to type of degree, table 8.20 for example showed that 53% BBA graduates found some accounting courses less useful while this was 46% among BAc. A smaller proportion of 2% of BBA compared to 12% BAc found management courses least useful. About the same percentage of 26% BBA and 21% BAc graduates listed other courses. Again about the same percentage of 19% BBA and BAc found all the courses valuable. There was no significant difference between the two groups, as shown in table 8.20. This again confirmed that the complaints applied equally to both BBA and BAc.

It however appeared that year of graduation had a great influence on the rating of courses. The differences among the three main groups were found to be significant at 0.0002 prob value. The most critical group of accounting courses was the 1985/86 whose proportion was 67%, followed by the 1983/84 graduates with 39% and the 1981/82 with 33%. The proportions of

those who were critical of management courses were 13%, 7% and 8% respectively for the same order as year of graduation. Those who were critical of other courses were (in the same order) 9%, 35% and 29%. Lastly the proportions of those who found all courses useful were 10% for 1985/86, 19% for the 1983/84 and 31% for the 1981/82.

Table 8.20 MAIN SBIS COURSES FOUND LEAST VALUABLE BY GRADUATE'S TYPE OF SBIS DEGREE

MAIN COURSE FOUND LEAST VALUABLE	TYPE OF DEGREE		
	BUSINESS ADMIN. (B.A)	ACCOUNTANCY (BAc)	
	No. Row % Col. %	No. Row % Col. %	Total No. Row. %
MANAGEMENT COURSES	25 28.4 53.2	63 71.6 47.7	88 49.2
ACCOUNTING COURSES	1 5.9 2.1	16 94.1 12.1	17 9.5
OTHER	12 30.0 25.5	28 70.0 21.2	40 22.3
NONE / ALL VALUABLE	9 26.5 19.1	25 73.5 18.9	34 19.0
Column Total No.	47	132	179
Column Total %	26.3	73.7	100.0

X^2 = 4; P = 0.2; Cramer's V = 0.15; No. Missing = 75

These results tended to convey the picture that the more recent a graduate was, the more critical he/she was of accounting and management courses and the less valuable all courses were perceived to be. One explanation for the differences was that

course changes could have taken place which were less beneficial. The second was that newly graduates were more discriminating of the courses and could remember them by name. The veteran graduates' memories could have faded and could have forgotten about their experiences or could not recall courses by name. This was the more likely reason than the former. This was because experiences of the researcher and some respondents as it will be shown later indicated that changes in the curriculum particularly in accounting, effected in the 1983/84 academic year were for the betterment of the programmes (refer to the appendix exhibits 8A1 to 8A4 of this chapter for a comparison of the old and the new course syllabi).

8.7.6 LACK OF PRACTICAL INDUSTRIAL EXPERIENCE BY STUDENTS

The sixth criticism against SBIS courses indicated by 18% of those who offered their comments it will be recalled was lack of practical or industrial experience. As this was related to the issue of academic course offerings, there were calls, from graduates in various years, to encourage students to engage in research projects and vocational employment even without payment in order to get a feel of industrial realities while they were at the university. The call was ranked fourth among the first recommendations having been mentioned by 14% (10 out of 70). Thus they criticised spoon feeding type of approach to teaching. Chipungu, a 1983 graduate, then an assistant accountant who was studying for ACCA in London, advised:

> students should particularly be encouraged into research of new ideas and methods. The system of learning outdated textbook theories should be abandoned.

On the need to have industrial practical experience, even without payment, Jonathan a 1986 graduate observed and recommended:

> I would rather say that most of the courses offered are highly academic and as such detached from the field work. I would recommend that the University places people in companies even not for money but experience, during vacations. Admittedly you will note that theory is very different from practise.

McLaren, a 1985 graduate, an assistant accountant, who complained about lack of experienced lecturers also echoed similar negative sentiments on the academic nature of courses which stressed passing examinations at the expense of practical training, when he said:

> During my time, emphasis was so much [put] on passing examinations and little was done to help an undergraduate acquire skills during vocational periods and get feedbacks from the employers during that period.

It was felt by respondents that affording students practical work would provide triangular benefits by enhancing the image of the school, providing industry with best qualified manpower and assisting the student to realise the practical industrial realities. It was felt that gaining industrial experience should be commenced from the first or second year. Jacob, a management accountant who graduated in 1983 for example advised that students should be given opportunities to have a feel of practical experience while at the university

> from the second year [which would be beneficial to] both SBIS and its graduates in that SBIS would be satisfied / proud in producing the right calibre of graduates required by the business world. The graduate would [also] have at least grasped certain ideas about the world and known the relevance of [the] courses... to the real world.

The constraints of accessibility into businessmen's premises for conducting research or obtaining employment were however realised. Lillian, a 1988 graduate, who was unemployed at the time of the study advanced one reason for lack of touch of the real business life by students as being

> the inaccessible organisations, in Zambia, which attach no value to [a] researching student.

A Kitwe businessmen, Mdalama, who was one of the few who offered their views on this aspect, lent some support for the need for students to get industrial experience when he said:

> Industrial breaks must be utilised for practical purposes [for students] to see business in reality.... The best way to learn how businesses are performing is by getting involved in the business work practically, not just theoretically.

8.7.7. LACK OF CONTACT WITH THE BUSINESS COMMUNITY

The likely lack of access proffered by Lillian was however squarely blamed on the University, as the seventh weakness of SBIS degree by 33% of graduates who commented on the weaknesses. Thus if the area of theoretical courses with a proportion of 33% is combined with the need for practical experience whose percentage was 18% and need for contact with the business community with 33%, these would account for 84% of all weaknesses. It is then clear that the core problem was lack of skills related to the business environment and interaction with it.

There was therefore a call ranked second out of the first recommendations made by about 19% (14 out of 70) of respondents for the University to interact with the business community. It

was thought that if the University had strengthened the placement office and made more and close contacts with the business community, this could have enhanced acceptability of the students by businessmen. It was therefore thought that problems of accessibility would partially be solved by strengthening the careers and placement office. Misisi, a 1986 graduate who was then a provincial assistant accountant called upon the university to

> strengthen the career and placement office so that all students from first year to third year work during vacation. This exposes the students to the working environment and are given a chance to relate what they are taught in class to what happens in reality.

Peter, a 1985 graduate, who appreciated the adequacy of the course contents but also observed the too little work some lecturers gave to students, also thought:

> There is need for the university to develop a sound relationship with ...organisations...[so that] students can be exposed to the practical work from their first year at University to the last year...[for them] to inter-twine the two.

It was strongly felt that such contacts would help break the barriers that have been experienced to be apparent between the University and the business community. It would also help dilute the myths that employers have particularly on the SBIS BAc degree. It has for example been shown above that in general, the SBIS courses had been found useful by graduates. It has also been shown above that the majority of their comments were favourable. Some of these comments will soon be quoted in section 8.9 which discusses the strengths of the SBIS degree. What was however not possible to know was how the employers evaluated the graduates and the SBIS courses. There was a view that employers did not

understand the type of training offered to BAc degree holders. Bridging this gap required close co-ordination between the University and the business community. Nkole, a 1983 graduate, then a cost accountant narrated his experiences as follows:

> I wish to expose the difficulties which students encounter [among which is] the dearth of knowledge among organisations about SBIS courses....graduates spend extra time and effort on trying to convince would be employers about the value and relevance of SBIS courses. (I believe this is the duty of the placement office of UNZA).

The need for interaction with the business community the graduates called for was seen to be vital by the few businessmen who commented on the issue. A Kitwe businessman, Ngwira, for example, also agreed with graduates' suggestions on the need for greater co-ordination between the University and the business community. He demanded:

> The University must [emphasis mine] work hand in hand with small firms because this will be beneficial to the small firms especially if worthwhile projects are done together. This sort of activity would expose students better to the realities [of the business world] than the literature read in class.

The apprehensions by the business community regarding the acceptability of the BAc degree which the graduates spelt out are now taken up for discussion in the next main section. But before that here is a summary of the main points in the ensuing discussion.

8.7.8. SUMMARY OF WEAKNESSES OF SBIS DEGREES

Although on the whole, sections 8.2 to 8.4 had shown that SBIS degrees were commendable, there were problem areas. Some of the weaknesses of the degrees identified were superficial coverage of some courses. It was felt that although the course outline looked good, some courses were not adequately covered. Another problem related to superficial coverage was the theoretical approach to some courses. Computer Science - BS 340 was heavily criticised for teaching computer programming when students had not even seen a computer, let alone learned how to use it. Some abstract courses such as BS 110 - Introduction to Economics, BS 210 Macro-Micro Economics and BS 471 - International Trade were also condemned for failing to relate the material to Zambian economic structure and for not being taught at the level of the firm.

The disapproval of the manner of teaching these courses did not imply they were found unimportant. To the contrary these courses were found useful. Some courses were found outstandingly beneficial. The most fruitful SBIS courses, included BS 420 - Advanced Accounting, BS 450 - Business Policy, BS 370 - Marketing Management, BS 210 Macro and Micro Economics.

Accounting graduates felt they wished they had taken more management courses and practical oriented courses. These included BS 370 - Marketing management, Computer Science (a proposed new course to teach the use and application of computers) and BS 471- International Trade.

Courses that were found least valuable in order, beginning with the worst were: BS 130 - Business and its environment, BS 360 - Production Management, BS 422 - Investment Management, BS 140 - Computers (inadequate and non-practical), BS 230 - organisational Behaviour and BS 380- Taxation (section).

Lack of industrial practical experience while at SBIS was found to be a constraint in their ability to integrate theory and practice. They advised that the placement office should be strengthened so that more students are able to do practical work during vacations even for non payment.

It was also felt that there was lack of close contact and co-ordination with the business community. Such co-operation would enable businessmen to have a proper understanding and appreciation of the type of education SBIS was imparting to students. This understanding would lead to closer co-operation and would enable the business community to open its doors to students for vocational employment or fieldwork research. Suggestions by a few businessmen also hinted on possibilities of engaging in mutually worthwhile projects between the business community, particularly small businessmen and the school.

Thus it may be concluded that the major obstacle inherent in the disadvantages of SBIS degrees advanced by 4 out of 5 commenting on the issue boiled down to lack of teaching practical related courses. Educationists could view it as lack of communication with the environment in which the University operated.

8.8 NON ACCEPTABILITY OF BACHELOR OF ACCOUNTANCY DEGREE

As indicated earlier, a total of 110 out of 254 graduates (43%) offered various additional comments when asked to do so on any aspect of the questionnaire if they so desired.

Apart from the general weaknesses of the degrees and the individual courses discussed above, there was a strong feeling by 74% (39 out of 53), who shared their experiences on acceptability of BAc degree, that the degree was not accepted by employers in industry (see table 8.21). It was viewed as the basic preparation for professional accountancy qualifications. Experiences were narrated of being regarded as inferior to even the Zambian Certificate of Accounting and Business Studies (CABS) offered by the Technical Colleges to junior and senior high school leavers. They lamented that a graduate was kept in the trainee stage until he acquired the professional qualification. Despite complaints that the degree was not accepted only 20 respondents bothered to offer reasons why it was not accepted. Among the reasons advanced were:

a) colonial prejudice (15%).

b) discrimination by large expatriate dominated organisations (15%).

c) regarded as inferior to accountancy diploma holders (40%). (This is a Zambian qualification offered to high school leavers by a few Technical colleges).

d) failure to distinguish between a public and a business Accountant (25%).

e) difference between university education and professional training (15%).

They also pointed out consequences of the weaknesses or non acceptability of the degree which included (see table 8.22 for the rest of the main weakness):

a) wasted retraining time (38%);

b) under-utilization of graduates by employers (23%);

c) feeling of frustration or humiliation (13%).

Their opinions, experiences and recommendations will now be presented with illustrations to bring their points home.

Table 8.21 GRADUATES' EXPERIENCES WITH BAc ACCEPTABILITY

	No.	%	Valid %	Cum %
B.Ac is not accepted	39	15	74	74
Integrated courses adequately equip students to fit in industry	9	4	17	91
B.Ac graduates experience accelerated advancement	3	1	6	96
Other	2	1	4	100
No Comment	201	79	Missing	
Total	254	100	100.0	

Table 8.22 CONSEQUENCES OF THE WEAKNESSES OF DEGREE

	No.	%	Valid %	Cum %
Wasted retraining time	12	5	39	39
Under-utilised / lack of promotion	7	3	23	61
Feeling of frustration/ humiliation	4	2	13	74
Difficult to assimilate into job	2	1	7	81
BAc degree will lose popularity	2	1	7	87
Turnover of staff result in frequent programme changes	2	1	7	94
Frequent changes of staff result in different batches of graduates	1	0	3	97
Other	1	0	3	100
No comment	223	88	Missing	
Total	254	100	100.0	

8.8.1 REASONS FOR NON ACCEPTANCE OF BAc DEGREE

Although the reasons mentioned above may be regarded as unrepresentative since they were given by a "minority" of 20 respondents out of the large sample of 254 graduates, they were given attention in the analysis. The basic reason was that they provided some insight into the root causes of apprehensions by both students and graduates on the commensurateness of the degrees, particularly the degree of Accounting. Without this information, it would have been very difficult to have any idea as to why a consistent 1 out of 5 said the degrees were not suitable to work in a small or large organisation. Further, the motives for arguing that the BAc degrees was not sufficient by a good number of respondents who bothered to provide the additional information would have been unknown. Still further, these exploratory reasons opened the door for further testable empirical research. Viewed in this light, the reasons should be found very beneficial.

As in other responses, one answer was allowed per person. Thus if a person gave five reasons for example, the first one mentioned or the one laboured on most was assumed to have been the most important to the respondent and only this one was therefore recorded. These numbers therefore partially tell the whole picture as even quotations which were thought to have been the most relevant to a particular topic will show since they provide more reasons. An attempt was made to be as representative as possible by quoting from graduates, across the board, who completed in various years.

8.8.1.1. COLONIAL PREJUDICE

Three out of 20 persons indicated colonial prejudice as one of the reasons responsible for non acceptance of the accountancy degree in spite of being regarded by graduates as being equivalent to professional accounting qualifications. Mbikusita, a 1981 graduate, who was temporarily out of employment at the time of the study stated:

> There is a strong resistance in the working environment... especially to accountancy graduates... due to broadly speaking, neo-colonialism.

Sibanda, a 1981 graduate, then a Financial analyst repeated the same message but added:

> Whenever the university [UNZA] advertises in the papers looking for accountants it leaves out BAc degree holders. Does this mean a lack of confidence in its own BAc graduates?

8.8.1.2. DISCRIMINATION BY LARGE EXPATRIATE DOMINATED FIRMS

About 15% of respondents mentioned discrimination as one of the reasons. Clarence a 1982 graduate, then a trainee accountant shared his views on the non-acceptability of the BAc degree by large parastatals as follows:

> ... However, in some large parastatal firms like MIEC Ltd; the Bachelors' degree holder is not considered as suitable to assume a position of an accountant. What is required is for one to [obtain] an ACCA qualification.

Another 1982 graduate, then a management accountant had this to say on mistreatment of accounting graduates by large firms:

> Large firms in most cases have tried to make book keepers or Accounting technicians out of graduates who should rightly have been given the chance to understudy the accountants. This has led the graduates in accountancy changing jobs many times from large firm to large firm. [This has not been a] worry to those that joined the small firms or the business administration graduates.

He advocated for launching

> an educational campaign...to inform employers about [adequacy of A/C graduates] otherwise employers will continue looking elsewhere for possible candidates to recruit especially those with CACA, ACA ICMA

8.8.1.3 BAc REGARDED AS INFERIOR TO PROFESSIONAL CERTIFICATE

The most important reason advanced by 40% (8 out of 20) of those who commented on reasons for rejecting the BAc degree was the tendency by employers of regarding it as an inferior degree to professional accountancy or diploma holders by insisting on acquiring of the professional qualification before a graduate moved from the trainee category. It was argued that the degree holder was regarded only as raw material for further training. Thus the degree holder was considered unsuitable to assume a position of an accountant (even after experience) until he obtained other professional qualifications such as ACCA before being recognised. He was also regarded as inferior to graduates of other colleges such as Chingola School of Accountancy. (This is an institution owned Zambia Consolidated Copper Mines, used for training their own staff).

8.8.1.3.1 The Need for Students to Obtain Professional Accounting

There may be a tendency by readers to disregard such kind of comments by only 8 out of 20 respondents out of the whole sample of 254, as being too few cases for drawing up any meaningful relationships. But independent questions addressed to undergraduates and graduates ascertained that the majority of BAc graduates felt the need to obtain professional accountancy

qualifications in order to be acceptable. All Students were asked to indicate what their first activity would be after graduating.

Results indicated that a total of 121 out of 181 students (67%) selected salaried jobs while the second category chose professional accountancy (18%). The rest indicated other studies (11%) and only 4% chose starting their own businesses.

When results were broken down according to type of preferred degree, findings showed that a significant difference existed at 0.0003. In particular there was a larger proportion of Bachelor of Business Administration (BBA) hopefuls accounting for 71% who preferred salaried employment compared to 65% of Bachelor of Accounting (BAc). This difference was basically due to a felt need by 24% of BAc prospective graduands to pursue professional accountancy qualifications while only 2% of BBA wished to do so. Further, the opposite was true for BBA hopefuls in that 23% wished to pursue other studies while this was the case for only 6% of the BAc expectants (refer to chapter 6 for detailed discussion).

These differences in expectations regarding the preferred study after graduation were confirmed by a different question which sought to discover what the student's preferred first study was. A total of 55% chose professional accounting qualifications, 13% professional management studies, 17% masters, PhD or other qualifications. Only 15% did not give any preference.

When broken down by type of preferred degree, this showed that 73% of accounting hopefuls intended to study professional accountancy as the first course while only 6% of business Administration potential graduands wished to so. The minority of the later group wanted to pursue professional management qualifications. Again treble the number of Business Administration hopefuls (33%) wanted to obtain masters or PhD or other qualifications compared to 11% of BAc hopefuls. These differences between BAc and BBA were significant at 0.0000. Cramers correlation was very high at 0.7, implying that there was a strong relationship between type of preferred study and degree (see table 8.23). These significant differences between "accountants" and "business administrators" were true regardless of student's year of study or sex (i.e. when these were held constant). However, sex or year of study *'per se'* had no influence on the choice of first study. Thus the inherent main difference was the type of degree the student was expecting to opt for.

On the whole, the findings revealed that more BBA hopefuls were contemplating choosing salaried employment than BAc prospective graduands who wanted to obtain professional accounting qualifications first.

This finding would tend to show that the critical factor in influencing students in their preferences of first activity was the type of degree a student was aspiring to select (normally in one's third year of study). BBA potential graduates therefore appeared to be contented with their first degree while BAc hopefuls felt to be insecure with the first degree.

Table 8.23 STUDENT'S PREFERRED FIRST MAIN STUDY BY PREFERRED TYPE OF DEGREE

PREFERRED FIRST STUDY	PREFERRED TYPE OF DEGREE		
	BUSINESS ADMIN. (B.A)	ACCOUNTANCY (BAc)	
	No. Row % Col. %	No. Row % Col. %	Total No. Row. %
PROFESSIONAL ACCOUNTING QUALIFICATIONS	3 3.0 6.3	97 97.0 72.9	100 55.2
PROFESSIONAL MANAGEMENT QUALIFICATIONS	20 87.0 41.7	3 13.0 2.3	23 12.7
MASTERS/ PHD OTHER	16 51.6 33.3	15 48.4 11.3	31 17.1
NO PREFERENCE	9 33.3 18.8	18 66.7 13.5	27 14.9
Column Total No.	48	133	181
Column Total %	26.5	73.5	100.0

X^2 = 82; P = 0.0000; Cramer's V = 0.7; No. Missing = 0

8.8.1.3.2. Need for Graduates to Obtain Professional A/c

Similar findings were also established for graduates. Since the inception of the school in 1981, a great proportion of SBIS graduates have been accounting majors comprising 60% to 80% annually. This was also reflected in this study as 74% (187 out of 254) of the respondents were BAc degree majors. Almost the same percentage (73%) was found to be true when asked a different question about the major field of their highest qualification attained.

Graduates of 1981 to 1986 were also asked what their first activity was. When the results were analysed, these revealed that the largest majority of 230 out 254 or 91% had sought employment first. One person only went straight for professional accounting studies and another did a masters degree. The rest (9%) had not yet secured employment. This group was from the 1986 graduands.

When those who were not employed were excluded, results showed that 99% had selected salaried jobs as the first occupation since the inception of the school. As would be expected with such an overwhelming percentage of job seekers compared to other options, sex, type of degree or year of graduation had no influence. That is there were no significant differences among males versus females, BAc versus BBA and 1981 to 1986 graduates. Analysis by type of degree showed that 98% and 99% of BBA and BAc respectively chose salaried employment. The significance was 1.0 and the correlation of coefficients were 0.05 for phi and 0.05 for contingency coefficient. The high level of significance at 1.0 showed that the two groups were the same and therefore there was no difference. The weak correlation coefficients showed that other factors could have been more influential. For a full discussion of graduates' working experiences refer to chapter 6. The concentration in this section is on tendencies of seeking further accounting studies.

On first sight, the findings just presented would tend to be differ with students' results presented above in that the tendency to pursue professional accounting qualifications first by the BAc graduands were absent. Further, the differences

observed between the type of degree also disappeared. These differences between the two groups were however only apparent. The appropriate interpretation was that although the graduates would have preferred to obtain accounting qualifications first, financial constraints to pursue studies independently forced them to seek employment first in the hope that those employers would sponsor them for accounting qualifications. Alternatively, they would have hoped to embark on private studies while in employment. The other possible explanation of the apparent differences between students and graduates would be that with the observed experiences of graduates, students were coming to terms with requirements by employers for them to obtain a professional accountancy qualification before they could be recognised.

Reference to a different question which asked graduates to indicate their highest other qualifications since obtaining their first degree confirmed the first explanation of seeking employment first then expect to be sponsored for further studies or pursue on their own. Results showed that on the whole, graduates were not contented with achieving a first degree only. About 61% had embarked on various courses while 39% had not yet done so. Thus out of the total respondents, 7% had obtained professional accounting qualifications the largest majority of 36% were studying professional Accountancy, 4% had completed other qualifications, 8% only were doing management qualifications and 5% were carrying out MBA, MA or other types of degrees.

As would be expected from the ensuing discussions, BBA degree holders were more contented than BAc degree holders. This was inferred from the evidence that when all respondents were considered (including those who had not yet embarked on any study), it was found that a greater proportion of 52% of BBA had not yet embarked on any study . The percentage was 34% in the case of BAc degree holders. Again there were not many surprises in tendencies to change career patterns. Out of all graduates more BAc degree holders accounting for 9% had obtained accounting professional qualifications, compared to 2% BBA graduates. About 51% BAc were in the process of obtaining professional qualifications compared to 2% BBA degree holders. But more BBA graduates accounting for 11% compared to 2% BAc had obtained other qualifications, 22% BBA compared to 2% BAc were studying management, and 12% BBA as opposed to 2% BAc were doing MBA, MA etc. These differences were statistically significant at 0.0000.

When those who had not embarked on any postgraduate study were excluded from the analysis, the differences were more pronounced. These showed that 73% of all the graduates had either obtained or were studying for professional accountancy as their first study. Recall that the proportion of accounting hopefuls (students) who had stated that their first study would be accounting was also 73%. Thus if the few graduates who had switched fields were ignored, it could be concluded that accounting students' expectations or needs of achieving professional qualifications after graduation, were not wishful thinking, but were achieved. Accounting students and graduates were therefore similar in their needs of acquiring the professional qualifications.

Returning to graduates, out of the 73%, 11% had actually acquired the professional qualification while the greatest majority of 62% were still studying for it. The most preferred accounting qualification for which the majority of 39% were studying was ACCA while CACA was only 8%. Both of them were London based foreign qualifications. A smaller proportion of 7% of all the graduates had completed other types of qualifications, 12% were studying for management qualifications while about 8% were doing other studies such as MBA and M.A.

As was the case with students, there were no significant differences between males and females; and also on year of graduation. But there was a significant difference of 0.0000 when type of degree was considered. This revealed that while 13% of graduates who obtained BAc had completed professional accountancy, only 3% of BBA had switched their field to obtain professional accountancy. The same applied to those who were studying accountancy as 77% of BAc graduates were doing so compared to 3% of BBA. But 22% of BBA graduates had finished other qualifications compared to 3% BAc. Again a large proportion of 47% of BBA were studying management compared to 3% of BAc who had changed fields (see table 8.24).

Table 8.24 GRADUATE'S OTHER MAJOR QUALIFICATIONS SINCE 1ST DEGREE BY GRADUATE'S TYPE OF SBIS DEGREE

OTHER MAJOR QUALIFICATIONS	TYPE OF DEGREE		
	BUSINESS ADMIN. (B.A)	ACCOUNTANCY (BAc)	
	No. Row % Col. %	No. Row % Col. %	Total No. Row. %
Obtained Professional Accountancy	1 5.9 3.1	16 94.1 13.0	17 11.0
Studying Professional Accountancy	1 1.0 3.1	95 99.0 77.2	96 61.9
Completed Other Qualifications	7 63.6 21.9	4 36.4 3.3	11 7.1
Doing other studies (MBA, MA etc)	23 74.2 71.9	8 25.8 6.5	31 20.0
Column Total No. Column Total %	32 20.6	123 79.4	155 100.0

X^2 = 91; P = 0.0000; Cramer's V = 0.77; No. Missing = 99

These statistics can therefore be best explained by these additional statements without which it would be difficult to understand their implications. These findings therefore revealed that there was a gap between SBIS academic accounting qualification and employers' expectations or requirements.

The conclusions explain the feelings and anxieties of graduates that since the degree was regarded as inferior, one had to either keep on changing jobs or accept the reality and necessity of qualifying for professional accountancy. Some graduates however felt that there was a need for launching an

educational campaign on the adequacy of the SBIS BAc degree instead of emphasizing on professional qualification. This was the position taken by Musonda, a 1985 graduate, then a trainee accountant, when he argued against too much reliance on professional accountancy by employers which he said:

> ...has created a problem resulting in organisations under utilising us [due to] thinking that unless we have CACA, we are not capable. This is creating a frustrating ground for SBIS graduates. Our lecturers, please tell the world the truth.

James, a 1986 graduate, then a financial accounting trainee, referred to earlier in a different discussion, appealed to

> the University to explain to the business community that although the accountancy degree offered is academic and not professional, it certainly is not at the same level as AAT or ZDA.

8.8.1.4. FAILURE TO DISTINGUISH BETWEEN A PUBLIC ACCOUNTANT AND A BUSINESS ACCOUNTANT

The fourth reason, ranked third, which was advanced by 25% of the 20 respondents who commented on this issue, it will be recalled, was the failure to distinguish between a public accountant and a business accountant. Foloko, a 1981 graduate then a Senior Accountant felt that the rejection of SBIS accounting degree by industry was

> ... not based on the course content or mediocre quality of graduates, but it is because employers do not distinguish between a public accountant and a business accountant. At the moment employers feel graduate accountants are qualified to be employed as heads of accountancy department because they are not public accountants by law

8.8.1.5. DISTINCTION BETWEEN UNIVERSITY DEGREE AND PROFESSIONAL TRAINING

The fifth reason for non recognition of the BAc degree and the consequent apparent insistence by employers, on professional qualification was best described by a small proportion of 15% of the 20 respondents. They summed up the problems related to the non-acceptability, the reasons for this and experiences of frustration by graduates. They believed that there was an important distinction between obtaining a university education and acquiring a professional training particularly in the field of accountancy. BAc was not seen as an end in itself but a preparatory ground for gaining and assimilating accounting skills. This view was in agreement with the findings of this study referred to above on the presence of a gap between SBIS academic accounting qualification and employers' expectations which forces graduates to embark on further training in accountancy. This was explicitly explained by Kashoki, a 1983 graduate, a senior assistant accountant studying in London when he observed and recommended:

> Since I left UNZAMDO,I have come to accept the important distinction between gaining university education and getting professional training, especially in the field of ACCOUNTANCY.
>
> Trained graduates as opposed to educated graduates are what small or large firms look for. UNZAMDO SBIS (BAc) must inevitably tailor its course contents to the demands of professional accountancy .... [The syllabus should include] aspects of regulatory framework of accountancy i.ei current international standards. Greatest of all, more professional methods of assessment should be considered i.e.100% assessment in one sitting.

Another graduate of 1985, Phiri, a trainee accountant who was studying for ACCA in London said:

> SBIS courses equip a graduate with a very broad appreciation of the business environment which is quite helpful especially when one embarks on further professional studies like ACCA.

8.8.2 CONSEQUENCES OF NON ACCEPTANCE OF BAc DEGREE

It was argued by 31 respondents, who offered views on non acceptance, that regarding BAc degree, voluntary or otherwise, as a stepping stone to professional qualifications had serious consequences. The most important four concerns mentioned by about 81% of them, as shown above, were that it resulted (or would result) in:

a) under utilisation of graduates by employers or inhibited prospects for promotion (23%);

b) wasted retraining time (39%);

c) feeling of frustration or humiliation (13%);

d) loss of popularity of the BAc degree (7%).

The next three subsections attempted to investigate the first three points by referring to graduates' submissions and independent questions that were addressed to all graduates.

8.8.2.1 UNDERUTILIZATION AND LACK OF PROMOTIONAL PROSPECTS

Soon after entering industry, graduates realised that they would be treated as trainees or book keepers until they obtained professional qualifications. Some felt that this was underutilising their skills by misplacing them in inferior positions. Others also complained that this constrained their prospects of promotion as employers thought they were not capable of holding higher positions or were not legalised to practise as accountants. Kawimbe, a 1982 graduate, then a management accountant put it this way:

> Large firms in most cases have tried to make book keepers or accounting technicians out of graduates who should rightly have been given the chance to understudy the accountants. This has led the graduates in accountancy changing jobs many times from large firm to large firm. [This has not been a] worry to those that joined the small firms or the business administration graduates.

Musumali, a 1983 graduate, then an assistant accountant argued that lack of industry recognition

> hinders smooth progress for the graduates.... Diploma graduates are preferred to degree holders. In fact, given another chance, I would go for a diploma

It was not possible to test some of the assertions such as Kawimbe's regarding too frequent job changes among accounting graduates compared to business degree holders since no question had been included on the number of jobs changed since graduation. Again no direct questions had been asked on promotional "smooth progress" Musumali referred to. But some questions had been asked on initial versus their current organisations and the types of jobs they were performing. Therefore an attempt was made to utilise both indirect and direct questions to test the validity of some of the allegations.

In order to test whether or not there was a statistically large difference in changing from "large firm to large firm" between BAc and BBA graduates, a comparison was made on graduate's first organisation and the organisation he was working in at the time of the study.

8.8.2.1.1 Initial Type and Size of Organisation

Results showed that it was true that most graduates joined medium to very large business organisations (private and parastatal), accounting for 69%. About 27% were initially employed in the government. But a tiny proportion of 4% were employed in small private organisations. It was also true that more BBA graduates were employed in the government (36%) than BAc (24%). But less BBA (59%) were employed in medium to very large private and parastatal organisations than BAc (73%). But about the same percentage were employed in small organisations. These differences were however not significant. This implied that there were no differences between BBA and BAc graduates when they first sought employment.

8.8.2.1.2 Changes in Initial Versus Current Types of Organisations

Interesting results were obtained when initial organisation employed in by a graduate was compared with organisation employed in at the time of the study for cases with valid data on both variables. It was true that overall, frequent changes between one organisation and another had taken place. These changes were significant at 0.0000. A large proportion of about 70% had been initially employed in medium to very large private and parastatal organisations. But this dropped to 64% as a small percentage of 6% switched to government and small firms. In spite of this small loss, the medium to very large sector had on the whole gained as the proportion of those who were working in this

category at the time of the study had risen to 77%, an increase of 11%. This was basically gained from the government whose initial proportion of 27% was reduced to 15%. But the government sector had slightly made up for this loss as the total proportion of those working in the sector ended up being about 20%. The small firm sector was not stable either.

Graduates however tended to remain in the same sector category. For example, about 78% of those who were employed in the government at the time of the study had initially been working there. The percentage for the medium to very large was 84% while the small firm suffered the worst since only 25% appeared to have stuck to the same sector (see table 8.25).

Table 8.25 GRADUATE'S BASIC TYPE OF FIRST ORGANISATION BY BASIC GROUP TYPE OF GRADUATES'S ORGANISATION NOW

Basic Type of First Organisation	Basic Type of Organisation Now			
	Govern-ment	Medium/ Large / Private & Parastatal	Small Private	
	No. Row % Col. %	No. Row % Col. %	No. Row % Col.%	Total No. Row. %
Government	35 57.4 77.8	25 41.0 14.4	1 1.6 12.5	61 26.9
Medium / Large Private & Parastatal	7 4.4 15.6	146 92.4 83.9	5 3.2 62.5	158 69.6
Small Private	3 37.5 6.7	3 37.5 1.7	2 25.0 25.0	8 3.5
Column Total No.	45	174	8	227
Column Total %	19.8	76.7	3.5	100.0

X^2 = 92; P = 0.0000; Cramer's V = 0.45; No. Missing = 27

When BBA and BAc were studied separately, the conclusions did not alter. Both groups were found to be mobile. The differences between original type of organisation and the one at the time of the study were also significant at 0.0000 for BBA and BAc respectively (see tables 8.26 and 8.27).

These findings of similarity in changing jobs were confirmed when type of organisation graduate was working in at the time of the study was broken down according to type of degree. There were no significant differences between the two groups. As an illustration, 24% of BBA were working in the government while 18% of BAC did so. Again about the same percentage of 76% BBA and 77% BAc respectively were working in medium to very large business organisations. No BBA was working in a small firm but 5% of BAc did so. These differences were however not significant. Thus the two groups were not statistically different in selecting the basic sector. When year of completion at SBIS was considered, there was no significant difference in selecting a particular sector as well.

Two potential problems were however foreseen in this type of analysis. The first was that only three main classifications (for lack of enough cases to have more categories) were done. These were government, medium to very large private and parastatal, and small firms. The second likely problem was that changes within the same sector could not be reflected with the kind of question used. It could therefore be argued that it was possible that changes between BAc and BBA could have been more pronounced than was reflected if it was possible to study job changes.

Table 8.26 GRADUATE'S BASIC TYPE OF FIRST ORGANISATION
BY BASIC GROUP TYPE OF GRADUATES'S ORGANISATION NOW
CONTROLLING FOR..GRADUATE'S TYPE OF SBIS DEGREE:(BA:BUSIN ADMIN)

Basic Type of First Organisation	Basic Type of Organisation Now		
	Govern-ment No. Row % Col. %	Private & Parastatal No. Row % Col. %	Total No. Row. %
Government	12 57.1 85.7	9 42.9 20.5	21 36.2
Medium / Large Private & Parastatal	1 2.9 7.1	33 97.1 75.0	34 58.6
Small Private	1 33.3 7.1	2 66.7 4.5	3 5.2
Column Total No.	14	44	58
Column Total %	24.1	75.9	100.0

X^2 = 21; P = 0.0000; Cramer's V = 0.60

Table 8.27 GRADUATE'S BASIC TYPE OF FIRST ORGANISATION
BY BASIC GROUP TYPE OF GRADUATES'S ORGANISATION NOW
CONTROLLING FOR..GRADUATE'S TYPE OF SBIS DEGREE:(B.Ac:ACCOUNTANCY)

Basic Type of First Organisation	Basic Type of Organisation Now			
	Govern-ment No. Row % Col. %	Medium/ Large / Private & Parastatal No. Row % Col. %	Small Private No. Row % Col.%	Total No. Row. %
Government	23 57.5 74.2	16 40.0 12.3	1 2.5 12.5	40 23.7
Medium / Large Private & Parastatal	6 4.8 19.4	113 91.1 86.9	5 4.0 62.5	124 73.4
Small Private	2 40.0 6.5	1 20.0 .8	2 40.0 25.0	5 3.0
Column Total No.	31	130	8	169
Column Total %	18.3	76.9	4.7	100.0

X^2 = 73; P = 0.0000; Cramer's V = 0.47; No. Missing = 27

8.8.2.1.3 Current Size of Organisation

To test whether the conclusions made in the previous subsection would differ, size of firm based upon the number of employees in the organisation the graduate was working in at the time of the study was used. Since this was quantity data, the differences between means using Fisher's F- test. The mean number of employees in an organisation was 911 for BBA and 3624 for BAc. The F. value was 2.7 implying that the two groups, BBA and BAc were very close in the mean number of employees in the organisations they were working in. The F-test was not significant at 0.09 (see appendix to chapter 8, table 8A2.1). When year of graduation was considered, one way ANOVA was applied since the analysis was dealing with three basic categories of graduation year. The mean number of employees in the employing organisation were 2999, 2579, and 3639 for the 1981/82, 1983/84 and 1985/86 groups respectively. The F-value was 0.17 indicating that the three graduation year categories were almost the same. This was not significant at 0.84 (see table 8A2.2 in the appendix).

In order to have more insight in the variation of sizes of firms in which graduates sought employment, the quantity data of the number of employees in a firm was transformed into categorical data. The classification was based upon the 01 to 50 employees for a small firm as adopted in this study.

Similar conclusions were reached regarding graduates popular size of organisation. The greatest proportion of 89% of all graduates were employed in medium to very large organisations employing 51 to 60,000 people while only 11% were working in

small organisations with 1 to 50 persons as table 8.28 reveals. These differences were however not statistically significant. These findings generally agreed with graduate's own qualitative descriptions of their 'present' types of organisations. It will be recalled that about 20% were working in the government, 76% in medium to large private and parastatal organisations and 4% in small firm sector. Four conclusions were therefore drawn from these findings. First that both BBA and BAc sought first employment in similar sectors. Second they initially preferred to work in medium to very large organisations. Third both BBA and BAc frequently changed sectors. Fourth both groups generally preferred to remain in medium to very large organisations.

Table 8.28 MAIN SIZE CATEGORY OF GRADUATES'S ORGANISATION IN 1985 BY GRADUATE'S TYPE OF SBIS DEGREE

SIZE CATEGORY OF ORGANISATION	TYPE OF DEGREE		
	BUSINESS ADMIN. (B.A)	ACCOUNTANCY (BAc)	
	No. Row % Col. %	No. Row % Col. %	Total No. Row. %
01 - 50 (SMALL FIRM)	5 26.3 11.6	14 73.7 10.4	19 10.7
51 - 100 (MEDIUM FIRM)	4 21.1 9.3	15 78.9 11.1	19 10.7
101 - 200 (LARGE FIRM)	6 27.3 14.0	16 72.7 11.9	22 12.4
201 - 60000 (VERY LARGE)	28 23.7 65.1	90 76.3 66.7	118 66.3
Column Total No.	43	135	178
Column Total %	24.2	75.8	100.0

X^2 = .28; P = 0.96; Cramer's V = 0.04; No. Missing = 76

An interesting finding was however that there was some tendency among the 1985 to 1986 graduates to seek employment in the small firm with 01 to 50 people as the proportion was 24% compared to 4% for the 1983/84 and 8% for the 1981/82. But veteran graduates tended to join very large organisations. The proportions were 68%, 74% and 52% for the 1981/82, 1983/84 and 1985/86 groups respectively. These differences were significant at 0.01212 probe value.

8.8.2.1.4 Utilisation of BAc Graduates and Promotional Prospect

In order to test BAc graduates' allegation of being misused by turning them into book keepers and of being in a disadvantageous position in promotional prospects compared to BBA who had better chances, two questions which were originally intended to measure advancement of SBIS graduates since completion of degrees were found useful. They were asked to give their job descriptions and job titles. The later was then transformed into management levels. This approach of comparing accountants and business managers, performing different jobs may be criticised since they were different *'ab initio'*. However if it is accepted first that they had a common base i.e. SBIS bachelors' degree; and second that the main interest was in contrasting initial occupational level with achieved level, then such analysis should be found meaningful.

All graduates were asked to give their job descriptions. When job description was compared to year of graduation, results showed that the largest majority of 28% claimed they were involved in department or branch supervision. The next category

accounting for 23% were preparing accounts or annual reports. About 12% were doing auditing work, 11% were undergoing orientation and only 7% were assistant accountants. As would be expected, an interesting pattern emerged regarding the percentages of those

(a) undergoing orientation;

(b) preparing monthly accounts and annual reports; and

(c) departmental and branch managers.

They showed that more newly graduates were performing rudimentary activities than veteran graduates. This pattern did not however apply to assistant accountant / accountant category. These for example showed that proportionately higher percentages of 7%, 10% and 17% were involved in departmental orientation and 18%, 21% and 29% in preparation of accounts, the more recent the graduation year was i.e. 1981/82, 1983/84 and 1985/86 respectively. But the proportions decreased from 42% to 28% to 15% for departmental and branch supervision, the more recent the graduation year was (for the same period as above). These differences were significant at 0.0044 (see table 8A2.3).

Contrasting BBA and BAc revealed at least that BBA were in an advantageous position since only 9% were undergoing orientation while 12% of their counterparts were doing so. Further, most of those who were involved in departmental or branch supervision were BBA graduates accounting for 53% (of the 28% doing this job) compared to only 19% of the BAc graduates. Those who were performing assistant accountant or accountant roles were only 8% out of the total of 74% for BAc. This showed that very few had assumed such senior positions since 1981 (see table 8A2.4).

Results from analysis of their job titles showed that on the whole 43% of all graduates were trainee or assistant accountants. About 12% were management or bank trainee. But about 22% were accountants or senior accountants (including auditors). Finally 15% were assistant or department managers.

When these findings were broken down to year of completion, interesting patterns emerged. Among the trainee / assistants accountants, there were progressively lower levels of proportions as seniority on the job increased. In other words, the proportions of the trainee / assistant accountant category decreased the more remote the graduation year was. These were 27%, 47% and 54% for the 1981/82, 1983/84 and 1985/86 graduates. The reverse was true for the higher position of accountant and senior accountant. The more remote the graduation year was, the greater was the percentage of graduates in that category. That is, the proportions of graduates who had attained the positions of accountant or senior accountant were 31%, 22% and 12% for the 1981/82, 1983/84 and 1985/86 graduating groups. The same was true for management trainee or bank trainee whose proportions were 6%, 11% and 19% for the same graduating year categories. The reverse was again true for assistant or departmental manager which were 24%, 13% and 8% in the same order.

The implication was that graduates moved from the training category to higher levels as they gained more experience. These differences were statistically significant at 0.0009 (see table 8.29). Viewed from another angle, the data above also revealed for example that almost the same proportion (27%) of the 1981/82 graduates were still in trainee / assistant accountant stage as

those (31%) who had been promoted to the accountant or senior accountant category. This compared unfavourably with their counterparts, who were doing management related jobs. In their case, the proportions of those who were in the management trainee class was only 6% for 1981/82 group while 24% were assistant managers or departmental managers.

Table 8.29 [illegible]

Present Job Title	Basic Year of Graduation			
	1981 TO 1982	1983 TO 1984	1985 TO 1986	
	No.	No.	No.	Total
	Row %	Row %	Row %	No.
	Col. %	Col. %	Col. %	Row. %
	19	39	35	93
Trainee or	20.2	41.5	38.3	42.7
[illegible]	27.1	47.0	58.7	
Accountant	8.6	17.7	16.4	
	22	18	8	48
Accountant /	45.8	37.5	16.7	21.8
Senior Accountant	31.4	21.7	11.9	
	10.0	8.2	3.6	
	4	9	13	26
Management /	15.4	34.6	50.0	11.8
Bank Trainee	5.7	10.8	19.4	
	1.8	4.1	5.9	
Departmental	17	11	4	32
Manager /	53.1	34.4	12.5	14.5
Assistant Manager	24.3	13.3	6.0	
	7.7	5.0	1.8	
	8	6	6	20
Other	40.0	30.0	30.0	9.1
	11.4	7.2	9.0	
	3.6	2.7	2.7	
Column Total No.	70	83	67	220
Column Total %	31.8	37.7	30.5	100.0

χ^2 = 27; P = 0.0009; Cramer's V = 0.25; No. Missing = 36

Table 8.30 [illegible]

Basic Job Title	Type of Degree		
	Business Accountancy Admin. (B.A)	(Etc)	
	No.	No.	Total
	Row %	Row %	No.
	Col. %	Col. %	Row. %
	3	94	97
Trainee or	3.1	96.9	42.9
Assistant	5.2	36.0	
Accountant	1.3	41.6	
	4	45	49
Accountant /	8.2	91.8	21.7
Senior Accountant	6.9	26.8	
	1.8	19.9	
	14	14	28
Management /	50.0	50.0	12.4
Bank Trainee	24.1	8.3	
	6.2	6.2	
Departmental	23	9	32
Manager /	71.9	28.1	14.2
Assistant Manager	39.7	5.4	
	10.2	4.0	
	14	6	20
Other	70.0	30.0	8.8
	24.1	3.6	
	6.2	2.7	
Column Total No.	58	168	226
Column Total %	25.7	74.3	100.0

χ^2 = 99; P = 0.0000; Cramer's V = 0.66; No. Missing = 20

These differences between those doing accounting jobs versus management jobs were pronounced when job title by type of degree analysis was done. Concentrating on the main target groups and ignoring the few who had changed their careers, findings confirmed that while 56% of BAc were in the trainee / assistant accountant category compared to 27% who were holding substantive positions, the proportions for BBA were 24% and 38% (see table 8.30). These differences were significant at 0.0000. Cramer's V correlation coefficient was 0.7 while contingency coefficient was 0.6. These high correlations meant that type of degree explained most of the variation in job titles. When compared with year of study, these measures were 0.2 and 0.3 meaning that year of study did not fully account for the variation.

Since there was a possibility that studying BBA and BAc graduates together could have concealed the differences in progression rates, the two groups were further analysed separately i.e., controlling for type of degree. Ignoring the few who had swapped filed, the main conclusion did not alter. Only 8% were still in the trainee stage compared to 58% who were departmental or assistant managers among the 1981/82 BBA group. The other proportions were 15% compared to 45% and 58% compared to 0% among the 1983/84 and 1985/86 groups. The differences were significant at 0.0173. But analysis of BAc graduates indicated that higher proportions of old timers who were still in the trainee category prevailed. The proportions were 39% and 44% for the trainee versus substantive position holders for the 1981/82 group. The others in the same order were: 60% and 25% for 1983/84 and 64% and 15% for 1985/86 group. These differences were not significant at the cut off point since the significance level was 0.08.

It is important to note the differences in significance levels of 0.0173 and 0.06 for BBA and BAc respectively. Cramers's V and contingency coefficients were 0.4 and 0.5 for BBA; and 0.2 and 0.3 for BAc respectively.

The interpretation of the two pairs of statistics was that in the case of BBA, the low significance level meant that the year of completion had some influence on the type of title achieved. This was so because graduates completing in each of the three years were different from one another. This was further confirmed by the higher levels of Cramer's V and contingency coefficient. These meant that year of completion or seniority on the job partially explained the job title obtained by about 50% of the variation.

But in the case of BAc the higher prob value which was not significant meant that the three groups completing in 1981/82, 1983/84 and 1985/86 were not different, but similar. In other words, year of completion was not an important criterion to obtain a certain job title. Hence there were no differences among the three cohorts completing in different years. This was further confirmed by the lower levels of correlation of Cramer's V and Contingency Coefficient. The lower levels meant that year of obtaining the degree did not account for greater variation in the job title, but for only about 30%. Therefore the remaining greater variation could be explained by something else.

These findings would therefore appear to indicate that seniority was an important factor in promotional prospects in the

case of BBA explaining up to about 50% of variation or importance. But it was not so critical for BAc since graduates who completed in different years were not significantly different. Hence it could be speculated that perhaps some other criterion was important for BAc in addition to the degree qualification as seen above.

An investigation was therefore made to find out whether graduates' "other major qualification" was an important criterion particularly for BAc. All graduates including those who had not embarked on any study were considered in this analysis. Results showed that there was a statistical significance at 0.0000 prob value between those who had obtained professional accounting qualifications and those who were undergoing the same in their promotional prospects. A smaller proportion of 53% of those who had obtained professional qualifications compared to 65% who were studying professional accountancy were in the trainee assistant accountant stage. But a larger proportion of 41% of qualified accountants compared to 27% who were studying were fully fledged accountants or had been promoted to senior accountant. Cramer's correlation coefficient was close to 0.5 indicating a moderate strength of a correlation. Thus about 50% of differences in occupational positions attained were explained by the extra accounting (see table 8.31).

Further investigation was made to determine whether year of completion did not indeed matter much for BAc degree holders while it did for BBA. The question paused was to determine the chances of being promoted four, three or two years later for two persons who completed in the same year: One with BBA degree and

another with BAc degree. This therefore required holding the year of completion constant and seeing the effect of type of degree obtained on the type of job title.

Table 6.31 GRADUATE'S PRESENT BASIC GROUP JOB TITLE BY GRADUATE'S OTHER MAJOR QUALIFICATIONS SINCE 1ST DEGREE

Present Basic Job Title	Other Major Qualifications				
	Obtained/Studying/Completed Now				
	Professional Accountancy	Professional Accountancy	Other Studies		
	No. Row % Col. %	No. Row % Col. %	No. Row % Col. %	No. Row % Col. %	Total No. Row %
Trainee / Assistant Accountant	9 9.3 52.9	62 63.9 64.6	1 1.0 2.5	25 25.8 34.2	97 42.9
Accountant Senior Accountant	7 14.3 41.2	26 53.1 27.1	3 6.1 7.5	13 26.5 17.8	49 21.7
Other	1 1.3 5.9	8 10.0 8.3	36 45.0 90.0	35 43.8 47.9	80 35.4
Column Total No.	17	96	40	73	226
Column Total %	7.5	42.5	17.7	32.3	100.0

χ^2 = 97; P = 0.0000; Cont. Coeff. = 0.35; No. Missing = 20

Table 6.32 GRADUATE'S MANAGERIAL POSITION LEVEL ATTAINED BY GRADUATE'S TYPE OF BIBS DEGREE

Managerial Position Level	Type of Degree		
	Business Administration (BBA)	Accountancy (BAc)	Total No. Row % Col. %
Lower Management	17 13.6 29.3	108 86.4 64.3	125 55.3
Senior Management	27 33.3 46.6	54 66.7 32.1	81 35.8
Other	14 70.0 24.1	6 30.0 3.6	20 8.8
Column Total No.	58	168	226
Column Total %	25.7	74.3	100.0

χ^2 = 33; P = 0.0000; Cramer's V = 0.38; No. Missing = 20

Findings revealed that BBA and BAc were completely different in their likelihood of moving to a higher level. For the BBA 1981/82 group, only 8% were still in the management trainee category while 56% had attained department or assistant manager titles. But for the BAc group, a larger proportion of 39% were still in the accountant trainee compared to 44% who had acquired at least the title of accountant. These differences were significant at 0.0000. Cramer's V was 0.7 and Contingency

Coefficient was 0.6 indicating the strong relationship between type of degree and position held. That is the type of degree accounted for most of the variation. These findings were the same for the 1983 / 84 groups. The proportions were 15% for the trainee and manager in the case of BBA. But these were 60% and 19% for the junior and senior positions, respectively in the case of BAc. For the 1985/86 group these were 58% and 0% for BBA and 64% and 15% for the BAc.

When job titles were collapsed into two categories of lower and senior management levels, findings showed that a total of 55% of all graduates fell in the lower group while 36% were in the higher group. The rest of 9% were in "other" category since they could not be classified. The differences between BBA and BAc were again pronounced and were significant at 0.0000 (see table 6.32). A lower proportion of 29% of BBA as against 64% BAc were in the lower category. But a higher proportion of 47% of BBA were in the senior category compared to 32% for BAc.

Another aspect discovered was that on the whole the probability of a female being promoted was lower than a male as the proportions were 77% versus 52% respectively for the lower category. But it was 18% as against 39% for the senior category.

The other conclusions reached regarding greater chances of BBA progressing due to seniority on the job compared to BAc were again confirmed to be true, in the case of two management levels, when type of degree was controlled. The correlation coefficient was again higher for BBA than for BAc.

Analysis of management level attained by year of graduation again testified the earlier findings regarding higher proportions of veteran graduates getting promoted compared to their novice counterparts (see table 8.33). Controlling for year of graduation in order to compare chances of being promoted between BBA and BAc graduates who completed in the same year led to the same conclusions reached earlier. For example 13% of BBA who completed in 1981 were still in lower categories as opposed to 44% of BAc. But 68% of BBA as against 50% of BAc had been promoted. These differences were again significant at 0.0164. As for 1983/84 group the proportions for the lower category were 20% and 70% for BBA and BAc respectively. But they were 55% and 29% for the senior management level for the BBA and BAc respectively.

Table 8.33 GRADUATE'S MANAGERIAL POSITION LEVEL ATTAINED BY BASIC YEAR OF GRADUATION FROM SBIS

Managerial Position Level	Basic Year of Graduation			
	1981 TO 1982 No. Row % Col. %	1983 TO 1984 No. Row % Col. %	1985 TO 1986 No. Row % Col.%	Total No. Row. %
Lower Management	23 19.2 32.9	48 40.0 57.8	49 40.8 73.1	120 54.5
Senior Management	39 48.8 55.7	29 36.3 34.9	12 15.0 17.9	80 36.4
Other	8 40.0 11.4	6 30.0 7.2	6 30.0 9.0	20 9.1
Column Total No.	70	83	67	220
Column Total %	31.8	37.7	30.5	100.0

X^2 = 25; P = 0.0001; Cramer's V = 0.24; No. Missing = 34

The results therefore conclusively showed that the most important factors for a BBA degree holder to get promotion were two, namely the degree which accounted for the most part and seniority on the job. However, three factors were critical in the case of BAc. These were the degree, additional qualifications and to some extent experience on the job. These findings would tend to support accounting graduates' views that they encountered great constraints in obtaining promotions while business administration degree holders did not go through similar strains.

8.8.2.2. WASTED RETRAINING TIME

It was such kind of feelings as Kawimbe's and Musumali's presented in the last section of being regarded as inferior and the need for promotion that had forced graduates who had "another chance" to "go for a diploma" or professional accounting certificate. But this approach was regarded as a waste of time. Graduates therefore questioned why a person should spend four years at SBIS to obtain a degree just to end up spending a further three or more years to obtain a qualification he would have received after high school, with far less entry qualification requirements. Yet such certificates were regarded to be superior to BAc degree as Musumali said earlier. Graduates also argued that these qualifications were costly and not everybody could afford. Clavel, a 1983 graduate, then a management Accountant, emphasized the problem of wasted time in retraining when he said:

> ...SBIS courses, especially accounting courses, should be tailored more on the lines of professional bodies such as

> ZICA, ACCA or ICMA to facilitate professional acceptability once the graduate joins commerce and industry. The problem at the moment is that most emphasize on professional qualifications and hence SBIS accounting graduates waste a lot of their time "re-training" instead of contributing to national development immediately upon graduation. However, I must point it out here that ...the degree programme is not inferior to the said professional qualification.

In order to test the extent of retraining among graduates, two questions which had been asked to all respondents were used. Graduates were asked to indicate the highest level of educational qualifications they had attained since obtaining their first degree. The second question sought to find out what other major qualifications graduate had attained after graduating from SBIS.

Responding to the first question, regarding the highest education level attained, results showed that only 8 (2%) had obtained a master's degree. Responses to the second question have already been analysed above. These showed that 45% of the 61% who had completed or had embarked on some form of training were in the field of accountancy. This meant that a great majority of 73% of all graduates had completed or were still studying accountancy. When the field of undergraduate degree was considered, it was shown above that a great number of BAc degree holders had either completed (13% with BAc compared to 3% BBA) or had embarked on accounting studies (77% BAc compared to 3% BBA).

Further, the greatest majority of 47% out of the 62% who were undergoing training in accountancy preferred ACCA or CACA, both of which were foreign London based qualifications. These were also costly as some graduates pointed out in their additional comments above. Hence not everybody could afford to or have a chance of studying outside the country.

These findings therefore supported BAo graduates' arguments that their greatest majority "wasted" their time "retraining". What may be questioned however is whether the additional qualification was truly a waste of time as some perceived it. It would appear that there is a difference between BAo and professional qualification. Kashoki, has for example maintained, as seen above, that there is a distinction between "university education" and "getting professional training, especially in the field of accountancy". Again, although Clavel bemoaned about wasted retraining time, it would appear he also acknowledged the existence of some differences since he called for tailoring "accounting courses... on the lines of professional bodies..."

8.8.2.3 FEELING OF FRUSTRATION OR HUMILIATION

Since graduates felt that they were regarded as inferior and hence found it mandatory to obtain professional training, yet many could not afford or have an opportunity for such training, the ultimate result was humiliation and frustration in their jobs and with companies. This had forced them to change from one company to another in search of greener pastures as Kawimbe stated and "smooth progress" in their jobs as Musumali added. This was particularly so for those who were employed in large firms, who were in the majority. James a 1986 graduate, then a financial accountant management trainee, referred to above, also identified one consequence of non recognition of the degree or equating it to Zambia Diploma of Accountancy (ZDA) as:

> ...start being frustrated right from the beginning with the realisation that they wasted time at UNZAMDO, spending four years when they could have done ZDA for 3 years and still enjoy the same benefits or even better.

It is conceded that since this study was not a psychological test, it was not possible to measure "frustration" on the job. It was however possible to infer dissatisfaction from their own expressions. These were further tested by analysing six independent questions which had been addressed to all respondents. The aim was to determine whether assertions such as those relating to frustrations were true.

The first question asked all graduates to indicate the type of organisation they were working in at the time of the study. As seen above, the great majority of 76% of 229 were employed in parastatal, large and medium private companies. About 20% were working in the government and only 4% in small organisations. Their descriptions of the size of organisations they were working in were further confirmed by analysing their organisations based on the number of employees. The majority of 69% were employed in large organisations with a labour force of between 51 and 60,000. A total of only 11% were working for organisations employing up to 50 people.

It was shown in the previous section that there were frequent movements from one sector to another. This could have resulted from the frustrations, James referred to above, in search of better places.

A second question was used to gauge graduates' extent of frustration or satisfaction in their current jobs and with organisations. They were asked to state whether they had thought of leaving their jobs. a great percentage of 73% of 229 said they had thought about that.

When this was broken down to type of degree, findings revealed that there was no statistical difference in their wishes to leave their jobs between BBA and BAc (78% against 72% for yes) as table 8.34 shows. Year of study was not an important factor as there was no significant difference either. But even in this case, the great majority of 79%, 77% and 88% for the 1981/82, 1983/84 and 1985/86 had thought of leaving their jobs (see table 8.35).

Table 8.34 WHETHER GRADUATE EVER THOUGHT OF LEAVING PRESENT JOB BY GRADUATE'S TYPE OF BDIS DEGREE

Thought of Leaving Present Job	Type of Degree		
	Business Admin. (BBA)	Accountancy (BAc)	
	No.	No.	Total
	Row %	Row %	No.
	Col. %	Col. %	Row. %
No	13	48	61
	21.3	78.7	26.6
	22.0	28.2	
Yes	46	122	168
	27.4	72.6	73.4
	78.0	71.8	
Column Total No.	59	170	229
Column Total %	25.8	74.2	100.0

I^2 = 0.6, P = 0.04, Phi = 0.06, No. Missing = 25

Table 8.35 WHETHER GRADUATE EVER THOUGHT OF LEAVING JOB BY BASIC YEAR OF GRADUATION FROM BDIS

Thought of Leaving Present Job	Basic Year of Graduation			
	1981 TO 1982	1983 TO 1984	1985 TO 1986	
	No.	No.	No.	Total
	Row %	Row %	Row %	No.
	Col. %	Col. %	Col.%	Row. %
No	13	19	22	56
	26.8	33.9	39.3	25.2
	20.8	23.2	32.4	
Yes	57	63	46	166
	34.3	38.0	27.7	74.8
	79.2	76.8	67.6	
Column Total No.	72	82	68	222
Column Total %	32.4	36.9	30.6	100.0

I^2 = 3; P = 0.23; Cramer's V = 0.11; No. Missing = 32

The third question addressed itself to those who had contemplated leaving their jobs. They were further asked to state whether they were looking for a job at the time of the study. Nearly one out of two graduates with valid data (47%) admitted. But there were no statistical differences between BBA

and BAc or between veterans and new comers on the job market as tables 8.36 and 8.37 show. The main reason advanced in response to a fourth question were:

a) get greener pastures (60%). These included getting more money, promotion, job security, better prospects and getting more experience;

b) frustration relating to the job or organisation (30%).

When respondents' type of degree and year of study were considered, the outcome was that there was no evidence to support a view that differences existed between BBA and BAc or indeed between earlier and later graduates as tables 8A2.5 and 8A2.6 of the appendix clearly show.

Table 8.36 WHETHER LOOKING FOR A JOB AT PRESENT BY GRADUATE'S TYPE OF UBIS DEGREE

Whether Looking for a job at present	Type of Degree		
	Business Administration (BBA)	Accountancy (BAc)	
	No. Row % Col. %	No. Row % Col. %	Total No. Row %
No	24 28.2 54.5	61 71.8 52.1	85 52.8
Yes	20 26.3 45.5	56 73.7 47.9	76 47.2
Column Total No.	44	117	161
Column Total %	27.3	72.7	100.0

χ^2 = 0.01, P = 0.9, Phi = 0.02, No. Missing = 93

Table 8.37 WHETHER LOOKING FOR A JOB AT PRESENT BY BASIC YEAR OF GRADUATION FROM UBIS

Whether Looking for a job at present	BASIC YEAR OF GRADUATION			
	1981 TO 1982	1983 TO 1984	1985 TO 1986	
	No. Row % Col. %	No. Row % Col. %	No. Row % Col.%	Total No. Row %
No	30 33.3 54.5	34 40.0 58.6	21 24.7 45.7	85 53.5
Yes	25 33.8 45.5	24 32.4 41.4	25 33.8 54.3	74 46.5
Column Total No.	55	58	46	159
Column Total %	34.6	36.5	28.9	100.0

χ^2 = 2; P = 0.4; Cramer's V = 0.11; No. Missing = 95

Two conclusions could be drawn from these results on the likelihood of such a large percentage of graduates contemplating leaving their organisations. The first was that they were certainly frustrated in their jobs or organisations. Career dissatisfaction *'per se'* was ruled out since the majority still wanted to be accountants as will soon be shown in the responses to the sixth question. The second conclusion was that the expressions of the few that many graduates were changing jobs from one large firm to another were true. The next question probed was whether the aspect of "from one large firm to another large firm" was true.

The fifth question asked all graduates about the type of new organisation they would work in if they "left SBIS next week". Results revealed that in spite of frustration in large organisations the majority would still want to work in them. About 80% testified that they would work for medium to large private or parastatal organisations about 4% and 7% would work in the government and small firms respectively.

In spite of some sentiments that those who joined the small firms had not experienced frustration, and therefore remained in the same organisations, these views were again not supported. When compared to their original organisations only 0.9% of the original 4% would remain in the small firm sector. However the total proportion of the small sector would slightly increase from 4% to about 7%. But despite frustrations in the medium to very large private and parastatal companies, the majority of 80% would still want to work in this sector upon graduation. Most of the

new comers into this sector would be from the government. These differences were significant at 0.0013 (see table 8A2.7).

When the type of degree was examined, table 8A2.8 shows that a significant difference existed between BBA and BAc at 0.0497. More BBA than BAc (9% as against 77%) would work in medium to very large organisations. But no BBA would work in small compared to 9% for BAc. About 5% BBA versus 9% BAc would form their own businesses.

These findings were however in agreement with their opinion that graduates kept on switching from one firm to another within the large firm. This was again confirmed from responses to the sixth and seventh questions. Responding to the sixth question which sought to learn about the type of new job a graduate would prefer if he left the university next week, a majority of 73% of all graduates stated they would like to be accountants. The differences between BBA and BAc were significant at 0.0000. The proportions were 27% and 85% respectively. But 70% and 9% of BBA and BAc would go for a management job (see table 8A2.9). Year of graduation was not a factor in determining the new job (see table 8A2.10).

When asked the seventh question which attempted to explore whether the new job would be in a different or the same industry as they were working at the time of the study, just over half (54%) would change the industry while 45% would get a job in the same industry as "now". The differences between BBA and BAc were not significant (table 8A2.11). This was also true for year of graduation (table 8A2.12).

These wishes to change industry would tend to support their claims of dissatisfaction with their present jobs or industry. This also confirmed that many graduates were changing jobs from one large firm to another large firm in the hope that they would be satisfied. But they still liked their fields of specialisation.

8.8.2.4 LOSS OF POPULARITY BY THE BAc DEGREE

The fourth consequence of refusal to accept the degree was related to the possibility of down grading of the BAc degree and its products by employers. It was argued that unless the University took some serious steps, they would continue undermining the degree by relying on foreign qualifications. They therefore called upon the University to modify its curriculum to take into account the needs of professional training. Mutengo, an assistant accountant who completed in 1984 emphasized the need to tailor the BAc degree towards professional courses when he urged the University to make

> slight changes [in courses in the accounting programme] to have a bias towards professionalism. [It is disappointing to] a graduate to have to read advertisements in the national papers for jobs where 99% of them make no mention of ...accounting ...degree holders. So for the SBIS graduates to be recognised openly, a few changes are necessary.

8.8.2.5 CONCLUSIONS ON CONSEQUENCES OF NON ACCEPTANCE OF BAc

Results from independent questions confirmed a lot of Graduates' apprehensions and complaints.

1. Most graduates were working in large organisations. The majority were employed in medium to very large private and parastatal organisation. Government was the second employer.

2. Frequent changes of sectors and organisations took place. But these were not limited to BAc graduates or large firms.

3. BAc graduates were justified in their complaints about lack of promotional prospects compared to their BBA counterparts. Quite a moderate percentage of BAc still remained in the trainee category after at least four years of working. This was not the case with BBA graduates, most of whom progressed easily to senior positions.

4. The kinds of job descriptions appeared to be rudimentary for somebody who had been on the job for four years.

5. Elementary type of activities and lack of progress in employing organisations led to dissatisfaction with organisations. This in turn led to frustration and humiliation when they compared themselves to their colleagues with other qualifications which were preferable in the accounting field.

6. The ultimate result was quitting the organisation in search of better conditions of service. Some had no alternative but to attempt pursuing qualifying for professional

certificates. Others had come to accept that this was the only possible alternative.

7. Graduates however tended to go in a vicious circle as the main employers were the same large private and parastatal organisations. Thus they finally found themselves with the same requirements or expectations of employers.

8. Graduates were however "in love" with the accounting profession. Most still pursued that career path in the outside world. In spite of changing organisations due to frustrations by some of them, they still wanted to be employed as accountants in spite such enormous odds.

9. It therefore appeared that there was a discrepancy, if not real at least one of perception, between the BAc degree and employers expectations of the demands of the accounting profession.

10. As a result, there were calls on SBIS to tailor the BAc programme to professional standards, to reduce wasted retraining time.

11. Recommendations were made for the university to make contacts with professional bodies,

> "since they insist that you repeat even courses that you have done in more depth than what they offer. [Contact was crucial in order to]: fight for more exemptions at ACCA level 2 since courses offered at UNZAMDO are of a high standard.

12. Suggestions were made to offer detailed specialised courses, such as "accounting standards in accounting programme", since

> "graduates, are not well prepared for professional qualifications in accountancy .... The need to produce broad based academicians may have been there in 1978, but certainly the economy today needs specialised, well trained graduates from UNZAMDO.

8.8.4. SUMMARY ON NON ACCEPTABILITY OF BAc DEGREE

Complaints that the BAc degree has not been accepted in industry, but treated as preparation for professional training were confirmed by the fact that about 1 out of 2 SBIS embarked on some form of training. Further 3 out of 4 graduates who had completed or were on training were accounting degree holders. Among the BAc majors, a great majority of 73% had either completed or were on training. BAc graduates encountered problems in promotional aspects. The main reasons advanced by graduates for not recognising the degree were:

a) regarding it as inferior to other professional qualifications;
b) failure to distinguish between a public and a business accountant;
c) colonial prejudice;
d) difference between university education and professional training;

The consequences of non recognition were:

a) wasted retraining time;
b) under-utilisation of graduates by employers and lack of promotional prospects;
c) Feeling of frustration or humiliation;
d) BAc degree becoming infamous.

Recommendations included:

a) Aligning the BAc degree to professional needs or programmes
b) Offering some professional courses such as accounting standards.
c) Closer co-operation with professional bodies.

8.8 [redacted] OF SBIS DEGREES

In spite of the negative attitudes towards the degrees as discussed in the preceding sections, the general feelings by the majority of respondents on the adequacy of the SBIS degrees, it will be recalled from the discussions at the beginning of the chapter were that SBIS degrees were adequate for:

a) working in Large firms (82% of 181 students and 76% of 254 graduates).
b) working in Small firms (80% of students and 82% of graduates).
c) starting their own firms (59% of students and 61% of graduates).

Each of these three issues has already been discussed above. Concentration in this section is on the general adequacy relating to the strengths of SBIS degrees. The general appreciation of the suitability of the SBIS degrees as reflected in their responses above (at least for working in large and small firms though not necessarily for starting their own businesses) was also revealed in their comments of satisfaction with the degrees despite their short comings and the associated problems. A majority of 82% (56 out of 68) provided favourable comments suggesting that SBIS courses were adequate for working in Large or Small firms. No favourable comments were made on the adequacy of SBIS courses in starting business.

Out of the 81 who commented on the strengths of the SBIS programmes, 61 (75%) alluded its broadness as or of its strengths since that enabled graduates to fit in any sector of the economy. The remainder of 25% said that courses were of high standards comparable to overseas universities' offerings.

When chi-square analysis was done to see whether many who provided these favourable comments were BBA graduates bearing in mind the adverse comments on the BAc degree in the previous sections, there was surprisingly no statistical difference between the two (see table 8.38).

A statistical difference at 0.0012 prob value was however found between strength and year of graduation. Earlier graduates appreciated broadness more than the quality of high level of courses. The proportions for broadness were: 91%, 85% and 50 for 1981/82 to 1985/86. But they were 9%, 15% and 50% for the same graduating groups on the factor of high quality (see table 8.39).

It appeared from their comments that the realisation that the SBIS BAc degree was not an end in itself but a stepping stone to one's career through further training or experience was gaining some ground among many SBIS graduates. It seemed that many had initially expected that they would start working as practising accountants immediately upon obtaining their degrees or a couple of years later. It therefore emerged, from their comments, that the general feeling was that the BAc degree was adequate. But with further training or experience, one should be able to accelerate in achieving higher positions. Lewanika, an

assistant accountant who was a 1983 graduate, studying at Buckingham University in London, referred to above, stated:

> SBIS courses are very advanced but are not just accepted by the industry because of some colonial prejudice - the mentality that everything good should come from Britain etc. ...on the whole, it is a more superior degree than many offered in the US or even Britain. Take me for instance, I am taking my masters degree studies in Economics without problems and yet my first degree was in accountancy...The hostile attitude I faced from most of my expatriate "Indian" accountants was later dissolved by my demonstration that I knew what I was doing...In Zambia, *what is required is not* ACCA but *improvement upon local qualifications*. ACCA is not suitable for Zambia [emphasis mine].

Meleki, a 1982 graduate, then a trainee accountant studying for ACCA in London also strongly supported the strengths and adequacy of the degree but also asserted:

> I strongly believe there are certain forces national and international who are all out to sabotage the whole course and reduce [it] to a status below that of even a certificate in Book keeping and Accounts. The four years since I graduated have [taught me that] most executives in companies in Zambia [equate] BAc [to] ZDA (Zambia Diploma in Accounts) [while others consider] ZDA as more advanced.... It is my conviction (especially having been in U.K. and pursued [the] so-called professional studies) that the SBIS courses are adequate to prepare one for management positions in industry and commerce and through *experience*. [underlining mine] one should be able to progress to senior management positions....I also think that both the people of Zambia (graduates) and industry could benefit more from a *close co-operation between SBIS and industry* [emphasis mine].

Table 8.38 STRENGTHS OF SBIS PROGRAMME BY GRADUATE'S TYPE OF SBIS DEGREE

Strengths of SBIS Programmes	Type of Degree		
	Business Admin. (B.A) No. Row % Col. %	Accountancy (BAc) No. Row % Col. %	Total No. Row. %
Courses are broad for one to fit in any sector	13 21.3 65.0	48 78.7 78.7	61 75.3
Courses are of High Standards	7 35.0 35.0	13 65.0 21.3	20 24.7
Column Total No.	20	61	81
Column Total %	24.7	75.3	100.0

X^2 = 0.9, P = 0.3507, Phi = 0.14, No. Missing = 173

Table 8.39 STRENGTHS OF SBIS PROGRAMMES BY BASIC YEAR OF GRADUATION FROM SBIS

Strengths of SBIS Programmes	Basic Year of Graduation			
	1981 TO 1982 No. Row % Col. %	1983 TO 1984 No. Row % Col. %	1985 TO 1986 No. Row % Col.%	Total No. Row. %
Courses are broad for one to fit in any sector	20 35.1 90.9	23 40.4 85.2	14 24.6 50.0	57 74.0
Courses are of High Standards	2 10.0 9.1	4 20.0 14.8	14 70.0 50.0	20 26.0
Column Total No.	22	27	28	77
Column Total %	28.6	35.1	36.4	100.0

X^2 = 13; P = 0.0012; Cramer's V = 0.42; No. Missing = 177

8.9.1 THE CASE FOR BROAD BASED COURSES

Insinuations by negative commentators that specialised courses were preferable to broad based courses were scoffed at by supporters of the degree. They alluded the broad based course structure, with specialization in some areas, as good in order to prepare graduates to fit in any sector of the Zambian economy. It was also the experience and observations of some graduates that SBIS graduates were doing favourably well in industry compared with their counterparts from other colleges.

Chaambwa, a 1983 graduate then a branch manager in charge of controlling a couch service branch operations of the United Bus Company of Zambia, the main national transport organisation, supported the broad based courses of SBIS. He however called for more concentration in some fields when he narrated his experiences:

> The broad based courses offered are helpful in large firms like the company I am currently working for... As a middle manager, I am able to *understand all aspects* [emphasis mine] of the organisation since any language being used in a certain department will be familiar. But specialisation in vital fields such as marketing and personnel [are pertinent]

Lilian, a 1986 graduate, added tha although the graduate

> does not have the skills to do the production job [the proper intergration of courses equips him with the skills] to co-ordinate all the activities which enable the smooth running of an organisation.

Daniel, a 1981 graduate, then a management accountant also agreed and argued thus:

> courses should not be narrowly structured to suit only a particular sector (small or large) but should rather be structured to prepare a student for entry into a world of different specialities.

8.8.2. APPRECIATION OF SPECIFIC COURSES

In addition, to broad based course structure, it was felt that the BAc degree programme provided the necessary principles to enable the graduate assimilate smoothly in a new job. Further the BAc degree structure of providing internalship (attachment to a company during vacation) and the programme as offered the new programme since academic year 1983/84 were appreciated. Simwanza, a 1988 graduate, then a trainee accountant expressing his views on the fourth year programme stated:

> The present restructuring of the courses whereby practical experience [through] internalship in one of the courses, prepares someone for professional studies as well.

Nevin, also appreciated the manner in which the accounting programme was taught when he affirmed:

> The courses at SBIS are quite good...at the moment, I am the acting provincial accountant for Northern Province under Zambia Co-operative Federation Accounting services. The fourth year courses..like BS 420, BS 421, BS 423 are very helpful... [as they were] really aimed at what I am doing now.... Courses in the lower grades should be made more professional as well like the 4th year course...

Although some graduates felt that the professional qualification covered accounting course in more details than SBIS courses, others such as Carter, a 1982 graduate, a trainee accountant felt:

> However, the degree in accountancy covered in detail the accounting principles such that a degree holder would easily assume such [a] position and would adequately cope with the demand required of [any] accountant's position

8.8.3. SBIS GRADUATES ACCELERATE IN THEIR POSITIONS

It was also felt by a few graduates that while the broad based course structure enabled graduates to fit in any sector of the economy, this broadness coupled with the high level of

courses offered enabled graduates to accelerate easily in their positions in various sectors of the economy. Paul, a 1981 graduate, then a manager (Inspection Division of a large company) maintained:

> Overall, the school has come up very well [in] that a good number of graduates are already in senior positions in various sections of the economy. This could be attributed largely to the wide coverage of courses that the school offers. Furthermore, the course contents are up to international level.

Ntonga, a 1982 graduate, who was a sales manager also added:

> A good number of SBIS graduates are doing very well and are placed in middle and top management in a much shorter period than most of their counterparts from other schools of the University of Zambia [which is a good pointer to the adequacy and recognition].

Some graduates narrated their own experiences and achievements to show that SBIS graduates were adequately prepared at the university and had attained higher positions in their organisations. Musonda, a 1985 graduate then a trainee accountant, said:

> our course is just too adequate to enable me do any accounting and management assignment. The only problem is that society seem to [over value] the professional accountancy course.

Msonta, a 1981 graduate, who was a chief accountant, having acquired a masters degree and was a member of IAA [International Association of Accountants] was also in agreement about having been well prepared and trained. He argued:

> Through my personal experience, I have not come across problems that have proved my training to be inadequate. I strongly feel that every graduate who did his homework well while in school should not find it difficult to settle in ...a large or small organisation. Some graduates may fail to tick. But this will be due to their own unique problems. *The programme has, in many cases, nothing to do with the failure of many graduates* [emphasis mine].

It was not possible to statistically investigate and test the graduates hypotheses that graduates were doing very well on the local scene and internationally in achieving higher promotions compared to other graduates from other schools of the now two universities in Zambia. It was shown above that a total of 38% of all graduates had attained positions which could be described as senior positions. But 55% were in the lower management level category. However if assistant accountant, which was regarded in this study as an entry position for someone with accounting qualifications is included in the upper management level then figures would show that close to 3 out of 5 graduates (57%) described their positions which may be interpreted as lower and middle management. These were:

a) Assistant accountant 21%;
b) Accountant or senior accountant 17%;
c) Internal or external auditor 5%;
d) Assistant manager or departmental manager 14%

If assistant accountant is regarded as a senior promotable position, then it could be from this angle that the results would tend to support their assertions that graduates appeared to attain higher positions within a short period. In their case this was about five years after graduation. It is however not possible to say whether or not it is higher than other graduates from other schools as data was not collected nor were any statistics available for comparative purposes.

6.8.4 SUMMARY ON STRENGTHS OF DEGREE

Supporters of SBIS degrees showed that the degrees were adequate for a graduate to perform his work properly. The strength of the programmes lay in their broadness which enabled graduates to fit in any sector of the Zambian economy and be able to co-ordinate various aspects of an organisation. It was felt that with experience graduates should be able to accelerate in their jobs. They shared their experiences or observations of the rate of acceleration of SBIS graduates. Findings from other questions also showed that close to 3 out of 5 graduates had attained the lower or middle management levels within a period of five years.

As in the case of the critics of the SBIS programmes and the BAc degree, the supporters of the BAc degree advised that specialisation in some fields was essential.

In conclusion, it is important to note that although the comments on strengths were favourable, such comments as BAc "prepares some one for professional studies" and "courses in the lower grades should be made more professional as well" strengthened the case for two issues discussed in weaknesses. These were first that certain areas of the BAc programme were not satisfactory as would be expected in the professional courses. Second, graduates expected to embark on professional courses after the BAc degree. In fact some of those who referred to themselves as assistant accountants were in London doing their professional qualifications before they could be accepted. Therefore even BAc degree supporters did not regard it as a terminal accounting qualification but a transition to

professional qualifications just as some critics of the BAc degree had come to accept. They were, however, in agreement with the non-supporters of the BAc degree in calling upon SBIS to align the BAc degree to professional accountancy qualifications. A few of the 1988 BAc graduates asked for the lower course offerings to be made more professional to the same level as fourth year courses. The inclusion of internalship in the fourth year was appreciated and found useful. As in the case of the general weaknesses of the SBIS degrees and the non acceptability of the BAc degree, there were calls to co-ordinate with professional bodies in order to make BAc degree more professional, but suitable for local conditions.

8.10. HYPOTHESIS TESTING

Evidence led to the rejection of the null hypothesis since there was no difference in students' or graduates' attitudes towards the adequacy of SBIS degrees in preparing them for assuming positions in large or small businesses or starting their own businesses, The alternative hypothesis that more students or graduates felt that the SBIS degrees prepared them adequately to work in large or small businesses was therefore accepted. However the degrees were not very suitable for starting business.

8.11 OVERALL SUMMARY ON THE ADEQUACY OF SBIS DEGREES.

The general findings were therefore that the two SBIS programmes in BBA and BAc were adequate for employment in large or small businesses. Both degrees had however some weaknesses. About 1 out of 5 thought it was not suitable for employment in small or large businesses. However the ratio of those who thought

it was not suitable for starting business was larger at 2 out of 5. The general weaknesses related to shallow coverage of some courses, the theoretical approach, irrelevant courses, and lack of industrial experience as stated by some students. Some courses, were however found very valuable. There were calls to offer opportunities for practical fieldwork.

The BAc degree was not viewed as a terminal accountancy qualification to enable graduates practise the trade, but a transitory, preparatory qualification for the professional training. Graduates appeared to have realised this situation. Some had come to terms with it since employers wanted a trained graduate as opposed to an educated graduate.

Others had however refused to accept this situation, viewing it as an anomaly. These expected to fit into accounting positions immediately upon or a few years after obtaining BAc degree as was the case with other accounting qualifications. They therefore thought of the BAc degree as a waste of time. Further, they kept on changing jobs from one organisation to another in the hope of finding a suitable job and organisation or training facilities. Failure to accept the BAc degree had also led to feelings of inferiority complex and frustration.

The general broad course offerings of degrees were appreciated by some people who commented on the issue. But a few did not like it. There were some calls for offering specialised courses in some fields. There was also unanimity in recommendations to align the BAc degree to professional programme based upon local conditions. Many respondents called upon SBIS to co-ordinate with the business community.

CHAPTER 9 FINDINGS ON GOVERNMENT STIMULATORY POLICIES: NON FISCAL POLICIES

9.1 INTRODUCTION

The fourth hypothesis was that small business stimulatory policies were inadequate to encourage potential small businessmen (including students and graduates) to form more businesses. One of the two objectives was to assess Government's fiscal and non-fiscal incentive policies.

In order to partly gauge non-fiscal policies, fieldwork concentrated on two aspects:

a) Leadership code (refer to chapter 3.4.4.3 for details):
   (i) Whether it was deemed as a discouraging factor to business formation by students, graduates and businessmen;
   (ii) Whether the three groups supported business ownership by leaders;
   (iii) Any relationship between students' and graduates' attitudes towards forming their own businesses and their inherent attitudes towards individual business ownership by leaders as opposed to state ownership.

b) General support for Government policy of assisting small businesses through SIDO or other agencies by the three groups:
   i) Awareness and knowledge of available small business supporting agencies and services they offer.
   ii) Support for government assistance to business firms.

Two fiscal incentives that were also evaluated by asking eight open ended questions to small business supporting agencies were:

a) Adequacy of Current levels of financing SIDO and small businesses through SIDO by the Government.

b) Effectiveness of Bank of Zambia's guarantee scheme as a source of capital for small businesses.

The last two were examined through personal interviews of 25 key organisations. These are taken up in chapter 10.

In order to study students, graduates and businessmen on non fiscal policies, they were asked the same questions on leadership code, SIDO and Government policy. They were also invited to give additional comments on code or any other issues.

To analyse leadership code, students, graduates and businessmen were asked to state the level of agreement or disagreement to statements on a five point scale. Results indicated that leadership code was not supported by the three groups. In particular it was revealed that although most students appeared to have Marxist or socialist political attitudes while at the University, they did not inherently have negative attitude towards business ownership by themselves (as seen in chapter 6) or by leaders. So the reasons why they did not form businesses were not related to their apparent political attitudes while at the University but to some other reasons, as discussed in chapter 6.

Students were least aware of SIDO and its activities. But SIDO was nevertheless better known than SEP by the three groups.

All three respondent groups supported a government policy of assisting all firms. But they felt that established firms should not be assisted at the expense of new firms. These new firms are needed to increase Zambia's industrial base. Further, it was felt that more assistance should be given to small new firms who were financially constrained. These had little or no access to private finance.

9.2 STUDENT'S, GRADUATES' AND BUSINESSMEN'S ATTITUDES TOWARDS LEADERSHIP CODE

9.2.1 TECHNIQUES APPLIED

Students, graduates and businessmen were asked to state the level of agreement or disagreement to fifteen statements on a five point Likert scale. These were scaled down to ten statements. The procedures required in attitude measurement, the reasons for selecting Likert scale technique and the procedure followed in constructing Likert scale are fully discussed in chapter 5A2.8.

Chi-square technique was applied to each of the three responding groups in order to have an overall impression of the respondents' views. To find overall differences among the three groups, chi-square was again found useful. However to ascertain an overall attitude for each of the three groups, Likert scale was the most appropriate technique. This required the application of the median and quartile analysis in order to discover the percentage of respondents who were below the average. In order to learn whether there were any differences among the three groups in their overall attitude, one way

analysis of variance was found befitting. But in order to determine the intensity of endorsing each of the statements, factor analysis was the relevant statistical technique. These techniques were supplemented with impressionistic evaluations i.e. content analysis to derive most benefits from the study on attitudes. As will be noted throughout the discussion, verbatim responses provided valuable information. This would not otherwise have been accomplished through any statistical formula or any amount of statistical analysis. This approach of combining statistical findings with respondents' contribution is normally recommended though analysis was time consuming and interpretation required careful approach.

Results indicated that four of the five principles of measurement described in chapter 5A2.9.6 were clearly met. First, unidimensionality was met since Likert Scale was able to measure one thing at a time. Second, linearity or equal-appearing intervals was satisfied since a five point-scale was used. Third, the results were reliable as comparison of the three respondents' responses produced "near-identical results". Applying the scale to the same objects was not possible in this study (see chapter 5A2.9.6 for further discussion). Fourth results were valid as on the whole, the scale measured what it was supposed to measure i.e. attitudes towards leadership code. This is further confirmed by respondents own statements.

9.2.2 ANALYSIS OF TOTAL AND ITEM SCORE OF ATTITUDE

A six step procedure, described in chapter 5A2.9.7.1 was used in constructing likert Scale. Briefly these were:

1) Composing item pool;
2) Testing these on a sample of 50 students and graduates;
3) Scoring the record for each of the respondents;
4) Summing up item scores to obtain a total attitude score for each of the respondents;
5) interval consistency of item - analysis in order to select items that correlated highly ;
6) Administering these to respondents.

The final result was a total score of each of the respondents on their attitudes to leadership code. Item analysis was applied to select 10 items that were highly correlated from the original pool of 15. Two techniques were adopted: 1) plotting for visual checking and 2) Pearson correlation to identify the significance levels. For a graphical illustration of how item analysis was done, using a plot, see figure 9A.1 where graduates' responses on whether the code should be enforced is plotted (item against total score on that item less that item). Item analysis using Pearson product-moment correlation produced high correlations of more than 0.6 for most of the items for students, graduates and businessmen. For example in the case of graduates, 5 of the items had a correlation of 0.7. The significance levels were 0.000 for all the items except one (leadership code is faithfully practised). Refer to tables 9.1(a) through 9.1(c) for Pearson product-moment correlation coefficients and significance levels for students. graduates and

businessmen respectively. They also show the mean and the standard deviation for each of the items compared to the total score on that item less item score. It will easily be seen that the item score was about 3 and a standard deviation of about 1. The mean for the total score less item in question ranged from 20 to 23 while the standard deviation ranged from 6 to 8.

Correlation of each selected item with all other items using Pearson Correlation also revealed that the items were highly positively correlated except one item which was negatively correlated. This was that "leadership code is faithfully practices in Zambia". The negative correlation meant that although respondents were not agreeable on all the other items, almost all disagreed with the notion that leaders in Zambia abide by the leadership code. The significance levels for all the items were 0.000 except for this one item (see tables 9A.1(a) through 9A.1(c) for the square matrices for each of the responding groups). It can also be seen that the statistics produced are similar to item analysis results.

The implication of the results was that respondents had a mild, almost negative attitude to leadership code. This was so because the total possible score was 50 yet the mean on each of the items was below 25.

One of the criticisms of Likert scale is that it offers "no metric or interval measures and that it lacks a neutral point. This makes it difficult to know where scores in the middle ranges change from mildly positive to mildly negative. This can easily

be noted in this study where the beginning and the ending of this mild attitude towards the code was not easy to determine. It was for purposes of offsetting the weakness of lack of neutral point that quartile analysis and standard deviations, which split responses, were adopted. Quartile analysis made it possible to determine the score obtained by 25%, 50% or 75% of the respondents. This technique is taken up in the next section.

Likert Scale's major limitation was its lack of reproducibility, meaning that the same total score for a respondent could be obtained in many different ways. The criticism is therefore that two identical scores may have totally different meanings. It is therefore argued that the pattern of responses becomes more interesting than the total score. To counter balance this criticism, chi-square was adopted to look at the pattern of responses. In addition Factor analysis was used to identify which items were highly endorsed and where great variance existed. Factor analysis was also found useful in showing how a seemingly unified attitude complex "broke up" into up to three independent factors. These two techniques are discussed after quartile analysis.

Table 9.1(a) Students' item analysis showing the mean, standard deviations and coefficients

VARIABLE	MEAN	STD DEV
TOTAL SCORE LESS ITEM SCORE ON NO BUSINESS	21.90	6.50
NO BUSINESS OWNERSHIP BY LEADER	2.67	1.41
TOTAL SCORE LESS ITEM SCORE ON NO SUBLETTING	21.85	6.74
NO SUBLETTING OF PROPERTY WHILE IN OFFICE	2.72	1.19
TOTAL SCORE LESS ITEM SCORE ON DISPOSE ALL PROPERTY	22.28	6.81
DISPOSE ALL PROPERTY TO OTHERS EXCEPT FAMILY	2.29	1.13
TOTAL SCORE LESS ITEM SCORE ON ALLOW FAMILY	21.94	6.98
ALLOW DISPOSING PROPERTY TO FAMILY MEMBERS	2.64	1.22
TOTAL SCORE LESS ITEM SCORE ON LET LEADER BE FREE	22.43	6.73
LEADER BE FREE TO DECIDE WHAT TO DO WITH ASSETS	2.14	1.13
TOTAL SCORE LESS ITEM SCORE ON NO CASH > K2,000	22.65	7.11
NO CASH AND BANK DEPOSITS EXCEEDING K2,000	1.92	.98
TOTAL SCORE LESS ITEM SCORE ON DISCOURAGES BUSINESS	21.66	6.67
CODE DISCOURAGES BUSINESS START UPS	2.72	1.38
TOTAL SCORE LESS ITEM SCORE ON ABANDON CODE	21.61	6.55
ABANDON CODE	2.96	1.47
TOTAL SCORE LESS ITEM SCORE ON ENFORCE CODE	21.50	6.44
ENFORCE CODE	3.08	1.50
TOTAL SCORE LESS ITEM SCORE ON FAITHFULLY PRACTICED	23.15	7.43
CODE IS FAITHFULLY PRACTISED	1.43	.88

No. included in analysis = 181

PEARSON CORRELATION COEFFICIENTS

NO BUSINESS		NO SUBLETTING PROPERTY		DISPOSE PROPERTY TO OTHERS	
TOTAL SCORE LESS ITEM SCORE	.64**	TOTAL SCORE LESS ITEM SCORE	.57**	TOTAL SCORE LESS ITEM SCORE	.53**
ALLOW FAMILY		**LEADER BE FREE TO DECIDE**		**NO CASH & BANK DEPOSITS >K2000**	
TOTAL SCORE LESS ITEM SCORE	.53**	TOTAL SCORE LESS ITEM SCORE	.61**	TOTAL SCORE LESS ITEM SCORE	.32**
DISCOURAGES BUSINESS		**ABANDON CODE**		**ENFORCE CODE**		**CODE FAITHFULLY PRACTISED**	
TOTAL SCORE LESS ITEM SCORE	.53**	TOTAL SCORE LESS ITEM SCORE	.36**	TOTAL SCORE LESS ITEM SCORE	.63**	TOTAL SCORE LESS ITEM SCORE	-.01

* - SIGNIF. LE .01 ** - SIGNIF. LE .001 (1-TAILED)
' . ' IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED

Key:

NO BUSINESS OWNERSHIP	- A Leader should not carry on any business.
NO SUBLETTING OF PROPERTY	- A Leader should not sublet his property or house.
DISPOSE PROPERTY TO OTHERS	- On assumption of office, dispose all property to others, except to family.
ALLOW DISPOSING PROPERTY TO FAMILY	- Allow leader to dispose property to any person including his family.
LEADER BE FREE TO DECIDE	- On assumption of office, leader should be free to decide what to do w/ assets
NO CASH & BANK DEPOSITS > K2,000	- A leader should not possess cash and bank deposits exceeding K2,000
CODE DISCOURAGES BUSINESS	- The code discourages people from starting up businesses
ABANDON CODE	- Leadership code should be abandoned
ENFORCE CODE	- Leadership code should be effectively enforced
CODE IS FAITHFULLY PRACTISED	- Leadership is faithfully practised by all in Zambia

Table 9.1(b) Graduates' item analysis showing the mean, standard deviations and coefficients

VARIABLE	CASES	MEAN	STD DEV
TOTAL SCORE LESS ITEM SCORE ON NO BUSINESS	21.00	6.72
NO BUSINESS OWNERSHIP BY LEADER	2.59	1.39
TOTAL SCORE LESS ITEM SCORE ON NO SUBLETTING	20.96	6.82
NO SUBLETTING OF PROPERTY WHILE IN OFFICE	2.63	1.31
TOTAL SCORE LESS ITEM SCORE ON DISPOSE ALL PROPERTY	21.44	6.90
DISPOSE ALL PROPERTY TO OTHERS EXCEPT FAMILY	2.15	1.16
TOTAL SCORE LESS ITEM SCORE ON ALLOW FAMILY	20.99	7.19
ALLOW DISPOSING PROPERTY TO FAMILY MEMBERS	2.59	1.17
TOTAL SCORE LESS ITEM SCORE ON LET LEADER BE FREE	21.49	6.99
LEADER BE FREE TO DECIDE WHAT TO DO WITH ASSETS	2.09	1.13
TOTAL SCORE LESS ITEM SCORE ON NO CASH > K2,000	21.67	7.36
NO CASH AND BANK DEPOSITS EXCEEDING K2,000	1.72	.85
TOTAL SCORE LESS ITEM SCORE ON DISCOURAGES BUSINESS	20.82	7.01
CODE DISCOURAGES BUSINESS START UPS	2.77	1.36
TOTAL SCORE LESS ITEM SCORE ON ABANDON CODE	20.78	6.84
ABANDON CODE	2.82	1.32
TOTAL SCORE LESS ITEM SCORE ON ENFORCE CODE	20.79	6.70
ENFORCE CODE	2.80	1.37
TOTAL SCORE LESS ITEM SCORE ON FAITHFULLY PRACTICED	22.16	7.71
CODE IS FAITHFULLY PRACTISED	1.43	.82

No. included in analysis = 254

PEARSON CORRELATION COEFFICIENTS

NO BUSINESS	NO SUBLETTING PROPERY	DISPOSE PROPERY TO OTHERS
TOTAL SCORE LESS ITEM SCORE .6998	TOTAL SCORE LESS ITEM SCORE .6668	TOTAL SCORE LESS ITEM SCORE .6868

ALLOW FAMILY	LEADER BE FREE TO DECIDE	NO CASH & BANK DEPOSITS >K2000
TOTAL SCORE LESS ITEM SCORE .4118	TOTAL SCORE LESS ITEM SCORED .6218	TOTAL SCORE LESS ITEM SCORE .4118

DISCOURAGES BUSINESS	ABANDON CODE	ENFORCE CODE	CODE FAITHFULLY PRACTISED
TOTAL SCORE LESS ITEM SCORE .4668	TOTAL SCORE LESS ITEM SCORE .6338	TOTAL SCORE LESS ITEM SCORE .7288	TOTAL SCORE LESS ITEM SCORE -0.01

8 - SIGNIF. LE .01 88 - SIGNIF. LE .001 (1-TAILED)

' . ' IS PRINTED IF A COEFFICIENT CANNOT BE COMPUTED

Table 9.1(c) Businessmen's item analysis showing the mean, standard deviations and coefficients

VARIABLE	MEAN	STD DEV
TOTAL SCORE LESS ITEM SCORE ON NO BUSINESS	20.24	5.03
NO BUSINESS OWNERSHIP BY LEADER	2.54	1.34
TOTAL SCORE LESS ITEM SCORE ON NO SUBLETTING	20.55	5.16
NO SUBLETTING OF PROPERTY WHILE IN OFFICE	2.23	1.14
TOTAL SCORE LESS ITEM SCORE ON DISPOSE ALL PROPERTY	20.90	5.23
DISPOSE ALL PROPERTY TO OTHERS EXCEPT FAMILY	1.88	.88
TOTAL SCORE LESS ITEM SCORE ON ALLOW FAMILY	20.86	5.28
ALLOW DISPOSING PROPERTY TO FAMILY MEMBERS	2.12	1.00
TOTAL SCORE LESS ITEM SCORE ON LET LEADER BE FREE	20.98	5.19
LEADER BE FREE TO DECIDE WHAT TO DO WITH ASSETS	1.79	.92
TOTAL SCORE LESS ITEM SCORE ON NO CASH > K2,000	21.16	5.42
NO CASH AND BANK DEPOSITS EXCEEDING K2,000	1.62	.79
TOTAL SCORE LESS ITEM SCORE ON DISCOURAGES BUSINESS	19.98	5.37
CODE DISCOURAGES BUSINESS START UPS	2.79	1.19
TOTAL SCORE LESS ITEM SCORE ON ABANDON CODE	19.83	5.02
ABANDON CODE	2.95	1.21
TOTAL SCORE LESS ITEM SCORE ON ENFORCE CODE	19.83	4.94
ENFORCE CODE	2.95	1.31
TOTAL SCORE LESS ITEM SCORE ON FAITHFULLY PRACTICED	20.88	5.37
CODE IS FAITHFULLY PRACTISED	1.90	.97

No. used in analysis = 195

PEARSON CORRELATION COEFFICIENTS

NO BUSINESS	NO SUBLETTING PROPERY	DISPOSE PROPERY TO OTHERS
TOTAL SCORE LESS ITEM SCORE .3791	TOTAL SCORE LESS ITEM SCORE .3881	TOTAL SCORE LESS ITEM SCORE .4481

ALLOW FAMILY	LEADER BE FREE TO DECIDE	NO CASH & BANK DEPOSITS >K2000
TOTAL SCORE LESS ITEM SCORE .3381	TOTAL SCORE LESS ITEM SCORED .4781	TOTAL SCORE LESS ITEM SCORE .2881

DISCOURAGES BUSINESS	ABANDON CODE	ENFORCE CODE	CODE FAITHFULLY PRACTISED
TOTAL SCORE LESS ITEM SCORE .1481	TOTAL SCORE LESS ITEM SCORE .4781	TOTAL SCORE LESS ITEM SCORE .4881	TOTAL SCORE LESS ITEM SCORE -.25

0 - SIGNIF. LE .01 81 - SIGNIF. LE .001 (1-TAILED)

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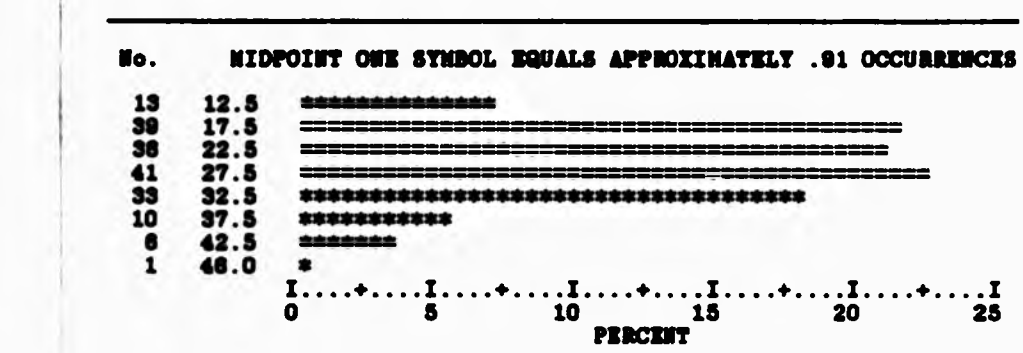
8.2.3. QUARTILE ANALYSIS OF LEADERSHIP CODE

Analysis of students' responses showed that the mean and median scores were 25 out of a total possible score of 50 as figure 8.1 shows. The results for graduates were 24 for the mean and 22 for median (see figure 8.2). Businessmen's results were 23 for both the mean and the median as figure 8.3 reveals. The first quartile scores were 18 each for students and graduates while it was 19 for businessmen (figures 8.1 to 8.3). The third quartile scores were 30, 28 and 26 for each of the three groups. The standard deviations were 7 each for students and graduates, but it was 6 for businessmen (refer to the same figures). The combined overall results for the three responding groups were 24 and 23 for the mean and median respectively. The first and third quartiles were 18 and 28 respectively. The standard deviation was 7 (see figure 8.4). The interpretation of the median and quartile scores was that on the whole the three groups were neither positive nor negative about leadership code. But students' attitude was on the mild side while businessmen's attitude was on the negative side. The high value for the standard deviation meant that there was a great variation among the respondents. Since three different respondents showed almost the same results, it can be concluded that the reliability and unidimensionality were satisfied.

Figure 9.1 Students' quartile analysis of leadership code



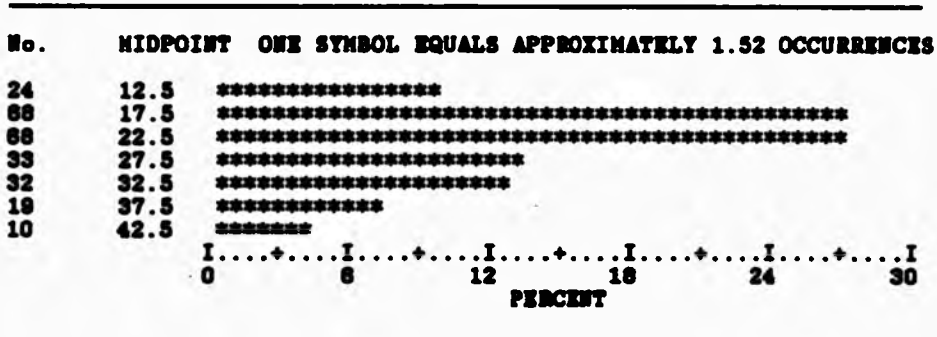
MEAN = 24.6; MEDIAN = 25; MODE = 30; STD DEV = 7.5

RANGE = 36 MINIMUM = 10; MAXIMUM = 46

1st Quartile = 18 ; 2nd Quartile = 25 ; 3rd Quartile = 30

Total No. 181 No. Missing 0

Figure 9.2 Graduate's quartile analysis of leadership code



MEAN = 24; MEDIAN = 22; MODE = 19; STD DEV = 7.7

RANGE = 33 MINIMUM = 10; MAXIMUM = 43

1st Quartile = 18 ; 2nd Quartile = 22 ; 3rd Quartile = 29

Total No. = 254 No. Missing = 0

Figure 9.3 Businessmen's quartile analysis of leadership code

BUSINESSMEN'S TOTAL ATTITUDE SCORE ON LEADERSHIP CODE

```
No.   MIDPOINT  ONE SYMBOL EQUALS APPROXIMATELY  1.56 OCCURRENCES

 16     12.5   **********
 38     17.5   ************************
 65     22.5   ****************************************
 57     27.5   ************************************
 15     32.5   **********
  3     37.5   **
  1     42.0   *
             I....+....I....+....I....+....I....+....I....+....I
             0         8        16        24        32        40
                                PERCENT

     MEAN = 22.8   MEDIAN = 23;     MODE = 24;    STD DEV = 5.7

     RANGE = 32     MINIMUM = 10;  MAXIMUM = 42

     1st Quartile = 19 ;  2nd Quartile = 23 ;   3rd Quartile = 26

     Total No. = 195  No. Missing = 23
```

Figure 9.4 Zambian Respondents' Quartile Analysis of Leadership Code

ZAMBIAN RESPONDENTS' TOTAL ATTITUDE SCORE ON LEADERSHIP CODE

```
No.   MIDPOINT ONE SYMBOL EQUALS APPROXIMATELY  3.76 OCCURRENCES

  53  12.5   **************
 145  17.5   ****************************************
 171  22.5   **********************************************
 131  27.5   ************************************
  80  32.5   **********************
  32  37.5   ********
  17  42.5   ****
   1  46.0
            I....+....I....+....I....+....I....+....I....+....I
            0         6        12        18        24        30
                               PERCENT

    MEAN = 23.6;   MEDIAN = 23;     MODE = 20;    STD DEV = 7.1

    RANGE = 36     MINIMUM = 10;  MAXIMUM = 46

    1st Quartile = 18 ;  2nd Quartile = 23 ;   3rd Quartile = 28

    Total No. = 630  No. Missing = 23
```

8.2.4 FACTOR ANALYSIS OF LEADERSHIP CODE

In implementing factor analysis, the six step procedure discussed in chapter 5A2 and in chapter 8.2.1.2 was followed. The appropriateness of the factor analysis model was tested using the three techniques described in the same chapters referred to above.

Apart from visual examination of the correlation matrix and the scree plot, three formal tests were carried out. First, Bartlett's test of Sphereoity was very large at 478, 938, 330 and 1845 for students, graduates, businessmen and all three responding groups combined respectively. Refer for example to table 9A.2 for all the Zambian respondents. The significance levels were very high at 0.00000 in all the four cases (see table 9A.2). This test meant that the method was appropriate since the higher the sphericity value and the lower the significance level, the more applicable the technique is. Second, KMO measure of sampling adequacy, which is an overall measure of all the variables was 0.9, 0.9, 0.7 and 0.9 for students, graduates, businessmen and combined respondents respectively. The measure of 0.9 is classified as marvellous. Third, for students and graduates, MSA for individual variables were all above 0.8 except one variable (code is faithfully practised) which had 0.5 and 0.4 (for students and graduates respectively). In the case of businessmen, all were above 0.7, except one (code discourages businesses) which was 0.6. When the three responding groups were considered together, all the values were above 0.8 except the variable on faith which was 0.4 (see table 9A.4 shown on top of the anti-image correlation matrix). These tests all indicated that the factor analysis model was suitable for use.

Computed eigenvalues and communality for initial statistics for Zambian respondents are shown in table 9A.5. Table 9A.6 shows the extracted, unrotated 3 factor matrix. It reveals the undesirable high correlations between a factor and several variables and one factor with another. Final statistics showing the reproduced correlation matrix which reveals the communalities and residuals are shown in table 9A.7. The factors were rotated using principal components method utilising varimax approach to obtain the final factors where a few variables only (not most as was initially the case) were highly correlated with one factor and factors were not correlated with one another. The rotated factor matrix for all Zambian respondents is shown in table 9.5. Tables 9.2 through 9.4 compares final factors of students, graduates and businessmen.

The overall combined results vividly revealed that respondents' attitudes towards leadership code was broken down in three distinct factors, namely business / property ownership, poverty and dishonesty as table 9.5 shows. The table also clearly indicated the level of endorsement of each of the items or variables. The most controversial issues were for example enforcement or abandonment of the code with 0.8 followed by no business ownership with 0.7 which are components of factor 1. Factors 2 relates to poverty which results by not allowing family or the leader to decide on his personal property and for requiring him to dispose his property and to keep no cash of more than K2,000 in bank. Factor 3 evidently manifests the apparent dishonesty of leaders regarding abiding by the leadership code. This was the highest with a correlation of 0.9. The negative signs revealed that it was negatively correlated with other

variables. In other words even respondents who had favourable attitude to other items were negative about the honesty of leaders to leadership code.

Separate comparison of students, graduates and businessmen demonstrated that students' attitude (table 9.2) was broken down into two: a) business/property ownership and b) poverty resulting from not allowing family to own business, no cash, disposing property and dishonesty. Graduates attitude was broken up into the same two beliefs (see table 9.3). Businessmen's 3 factors were poverty, implementation of code and business/property ownership (see table 9.4)

It should be noted that residuals in the reproduced factor matrix shows differences between observed and expected (see table 9A.7). These were very small across variables, the highest having been 0.2 for the combined analysis. The low variances confirmed that there were not great disagreements in respondents' responses. The many negative values showed that variables were negatively correlated. In other words, respondents did not support most of the requirements of the code. This is also revealed in the anti-image convariance matrix (table 9A.4).

Table 9.2 Students' rotated 2 factor matrix

ROTATED FACTOR MATRIX:
VARIMAX ROTATION - FOR FACTOR EXTRACTION :
USING KAISER NORMALIZATION

	FACTOR 1	FACTOR 2
	Business / Property Ownership	poverty
ENFORCE CODE	.83	.02
ABANDON CODE	.80	-.04
NO BUSINESS OWNERSHIP	.79	.19
NO SUBLETTING PROPERTY	.65	.23
CODE DISCOURAGES BUSINESSES	.58	.29
LET LEADER BE FREE TO DECIDE	.55	.53
ALLOW DISPOSING TO FAMILY	.18	.61
NO CASH/ DEPOSITS OVER K2000	.17	.58
DISPOSE PROPERTY TO OTHERS	.46	.53
CODE IS FAITHFULLY PRACTISED	-.26	.51

Table 9.3 Graduates'rotated 2 factor matrix

ROTATED FACTOR MATRIX:
VARIMAX ROTATION FOR FACTO EXTRACTION :
BASED ON - KAISER NORMALIZATION

	FACTOR 1	FACTOR 2
	Business / Property Ownership	poverty
ENFORCE CODE	.82	.06
NO BUSINESS OWNERSHIP	.81	.04
NO SUBLETTING PROPERTY	.70	.08
ABANDON CODE	.74	.08
DISPOSE PROPERTY	.72	.31
LET LEADER BE FREE TO DECIDE	.65	.35
CODE DISCOURAGES BUSINESS	.58	.05
CODE IS FAITHFULLY PRACTISED	-.24	.83
NO CASH/ DEPOSITS OVER K2000	.33	.54
ALLOW DISPOSING TO FAMILY	.41	.41

Table 9.4 Businessmen's rotated 3 factor matrix

ROTATED FACTOR MATRIX:

VARIMAX ROTATION - FOR FACTOR EXTRACTION:
USING KAISER NORMALIZATION

	FACTOR 1	FACTOR 2	FACTOR 3
	poverty	implementation of code	business/ property ownership
DISPOSE PROPERTY TO OTHERS	.78	.15	.05
ALLOW DISPOSING TO FAMILY	.73	-.02	.06
LET LEADER BE FREE TO DECIDE	.71	.02	.33
NO CASH/ DEPOSITS OVER K2000	.46	.19	.04
CODE IS FAITHFULLY PRACTISED	-.00	.78	-.04
ENFORCE CODE	.24	.68	.23
ABANDON CODE	.15	.67	.35
CODE DISCOURAGES BUSINESSES	..27	.39	-.29
NO BUSINESS OWNERSHIP	.12	.15	.80
NO SUBLETTING PROPERTY	.17	.07	.76

Table 9.5 Zambian respondents'rotated 3 factors

ROTATED FACTOR MATRIX:

VARIMAX ROTATION : FOR EXTRACTION USING -
KAISER NORMALIZATION.

	FACTOR 1	FACTOR 2	FACTOR 3
	Business/ property ownership	poverty	dishonesty
ENFORCE CODE	.83	.12	.10
ABANDON CODE	.79	.08	.13
NO BUSINESS OWNERSHIP	.73	.24	-.10
NO SUBLETTING PROPERTY	.63	.34	-.17
CODE DISCOURAGES BUSINESS	.44	.28	.09
ALLOW DISPOSING TO FAMILY	.08	.71	-.10
LET LEADER BE FREE TO DECIDE	.37	.70	-.06
DISPOSE PROPERTY TO OTHERS	.40	.66	-.02
NO CASH/ DEPOSITS OVER K2000	.10	.61	.34
CODE IS FAITHFULLY PRACTISED	.03	.02	.92

8.2.5 CHI-SQUARE AND CONTENT ANALYSIS OF LEADERSHIP CODE

While factor analysis was useful in identifying items that were highly endorsed, showing how the respondents' attitude on code "broke up" into up to three factors, which pinpointed their inherent beliefs, chi-square analysis proved useful in revealing interesting patterns of responses which could easily be perceived by the Zambian readership and politicians who are the decision makers, in the hope that these results would be found beneficial. As results will soon show, Likert scale and factor analysis which relied on calculated total and item scores clouded the pattern, of responses due to many responses of "I don't know". These resulted in lukewarm attitude using quartile analysis.

In chi-square analysis the five categories of "strongly agree" to "strongly disagree" were collapsed into three categories of "agree", "don't know" and "disagree". In this analysis, the combined respondents numbered 630. It was not found necessary, due to lack of space, to include in the report separate analysis of the relationship of leadership variables with other variables that were carried out for each of the three responding groups.

Results concluded that on the whole, the combined Zambian respondents had strong negative views towards leadership code. About 62% (out of 630) disagreed to the statement that leaders should not carry on any business while 30% agreed.

It was felt (64%) that leaders should be allowed to sublet their property including their houses. Leaders should also be allowed to pass their property to any person including family

members (68%). In fact an overwhelming majority of 8 out of 10 thought a leader should be free to decide what to do with his assets. Close to 9 out 10 rejected the ruling of forbidding leaders to have cash or bank deposits exceeding K2,000.00. They scoffed at the regulation of including any Zambian earning more than K2,500.00 per year into the leadership position. They instead unanimously recommended a minimum average salary of about K21,000. About 51% believed the code effectively discouraged business formation by leaders. The low proportion on this item reflected their strong belief (about 8 out of 10) that leaders were dishonest in implementing the code as most of them continued forming businesses while in office since there was no control. mechanism. They were however divided on whether the code should be abandoned (42%) or should be enforced (46%). However more respondents favoured both abandoning the code and allowing leaders to own business (65% against 50%). This was statistically significant. Likewise the majority disagreed to both enforcing the code and forbidding leaders from owning business (65% against 56%). This was also statistically significant. When these views were taken together, it concluded that respondents preferred leaders to be allowed to own businesses and abandoning the code. Detailed analysis of these views and content analysis of the reasons advanced in their extra comments will now be taken up.

It should however be noted that the basic reason for inclusion of content analysis was to offset one of the gravest weaknesses of quantitative analysis, particularly in social sciences and especially on attitude measurement. This was that it often fails to explain the accurate meanings of the statistics

and the reasons behind the responses. In the case of quartile and factor analysis, two identical scores could have quite different interpretations. This was for example reflected in a mild instead of negative attitude obtained, as chi-square above has already revealed. Likewise chi-square proportions were all very high as shown above.

But readers would not know why respondents expressed such views. Therefore the only prudent and realistic way of getting an accurate and meaningful picture was to supplement these statistical analysis with respondents' own views and reasons. Great effort and care was however under taken in postcoding their views in similar categories. The purpose was to have some pattern of their responses in order to correctly interpret their comments.

All three groups were asked for extra comments on code. Out of 181 students, 102 (57%) offered some comments (38% against code and 12% supportive while 6% were indifferent). A similar percentage of 55% (140 out of 254) graduates did so (46% against, 10% supportive). As for businessmen, 107 out of 203 (53%) who were available for interviews offered extra views. Those who were against the code were 81% and 16% provided supportive comments. The discussion begins with analysing the adequacy of the definition of a leader as per leadership code.

9.2.5.1. ADEQUACY OF THE DEFINITION OF A LEADER

Respondents were asked for their opinions on the code's requirement that a leader should not have cash or bank deposits exceeding K2,000.00 and that any Zambian with an annual minimum salary of K2,500 (equivalent to about £200 at 1988 rate) qualifies to the leadership category. The aim was to determine whether this classification of a leader was justified.

The cash requirement was unanimously rejected by 88% of all respondents. This was broken up as 85%, 89% and 90% student, graduates and businessmen respectively. Further the results showed that the minimum annual salary of K2,500 was too low. The suggested average minimum annual salary by 86% (561 out of 653) was about K21,000. The students' average was K16,000 with a maximum of K72,000, but a median of K12,000. The amount put forward by graduates was about K23,000 with the third quartile of K30,000. The one recommended by businessmen was K23,000 with a median of K16,000. The third quartile was K30,000. The differences were statistically significant (at 0.0008) between students on one hand, and graduates businessmen on the other hand. These differences between the two may be explained by the brief experiences of graduates in industry thereby being able to appreciate the actual value of money as opposed to classroom spoon feeding of the students (table 9A.8). Test of differences between sample means of graduates and businessmen was done, but was not significant since the values were included in the confidence interval. Equations 5A2.25 and 5A2.26 in chapter 5 appendix 5A2 were adopted.

It is clear that the overall view was that the cut off point of K2,500 for a person to be eligible to the leadership category was very little. However, this value was taken as the hypothesized value of the population mean. it was then formally tested (right tailed) using the interval estimate of the mean to determine whether it was included in the confidence interval at 0.001 significance level. The problem was hypothesized as:

μH_0 = K25,000 <- hypothesized value of the population mean annual salary of a leader

$H_0: \mu >$ K2,500 <- Null hypothesis: The true population minimum salary of a leader is equal to K2,500

$H_1: \mu >$ K2,500 <- Alternative hypothesis: population minimum salary of a leader is greater than K2,500

α = 0.001 <- significance level.

The problem was symbolized as:

a) $\bar{x}$ = 18,095 <- students suggested average average minimum annual salary of a leader (from table 9A.8)

s = 151185 <- students' sample standard deviation (table 9A.8)

n = 166 <- students' sample size (valid cases).

(i) Applying equation 5A2.27 for the estimated standard error of the mean, this results in:

$$S\bar{x} = \frac{\hat{S}}{\sqrt{n}} = \frac{15185}{\sqrt{166}} = 1179$$

(ii) Using equation 5A2.28 for finding acceptance limits gave:

$$\mu + Z \frac{\hat{S}}{\sqrt{n}} \times \sqrt{\frac{N-n}{N-1}} \quad \text{<-- upper limit}$$

$$\mu - Z \frac{\hat{S}}{\sqrt{n}} \times \sqrt{\frac{N-n}{N-1}} \quad \text{<-- lower limit}$$

μH_0 + 3.0902 (1179) = 2,500 + 3642 (Z value at 0.001 obtained from standard tables

= 6142 upper limit in one tailed test)

. . $\bar{x}$ = obviously falls outside the acceptable limit

Hence the null hypothesis H_0 for the true student population mean of the minimum annual salary of a leader being equal to the hypothesized value of the population mean as per leadership code was rejected.

The same procedure was adopted for graduates and businessmen. It is obvious that the same conclusion of rejecting the null hypothesis was arrived at since the means for these two groups were larger as seen above.

These results revealed that the requirement of forbidding leaders to have cash or bank deposits in excess of K2000 and using the K2500 as a minimum cut off point for one to be regarded as a leader were rejected. The vehemence of this rejection became more explicit when their comments were considered. Poor definition of code was one of the main reasons for not supporting code (even supporters disagreed with the definition) which are analysed later. The main first and second reasons were:

1) First reason
   a) Leaders have capital or access to financial resources- 62% (128 out of 206 commenting on first reason)
2) Second reason
   a) Code exists on paper-44% (57 out of 129 commenting on second reason)
   b) Zambia is a capitalist economy - 12%
   c) Inadequate definition - 11%

One of the reasons for feeling that the definition of who was a leader was inadequate was that the cut off point was so low that almost every Zambian, who was working in government or

parastatal was a leader (refer to chapter 3.4.4.3 for similar arguments by this researcher). Others thought that a definition of a leader, based on money was poor. Some people may be getting far much less than stipulated and they could still be leaders in their own communities, for example. Still more others pointed out that some people who earn the minimum stipulated amounts may not necessarily be influential in any capacity. For these reasons, some respondents such as Nande, a 1981 graduate did not state the suggested amount of salary. He argued:

> I do not regard salary as criteria, but should not be poorer than his subjects. I can't also specify [the] amount because organisations have different conditions.

Others such as Sonsbai, a 1981 graduate, who was a senior auditor, though in favour of the code, belittled the definition of a leader for being too inclusive. He feared the result would be victimisation of the ordinary citizen if it was effectively implemented. When responding to the attitude statement on whether the code should be implemented, he had in fact ticked the "strongly disagree" column. Yet he did not want the code to be abandoned and ticked the "not sure" column. In his submissions he stated:

> The definition of a leader has been poorly constructed to an extent where if reinforced, it would victimise the ordinary working Zambian. Leaders should only refer to middle and top management, including political leaders. [Further] I think the scale of K2,500.00 sounds like a joke even in terms of making personal savings to start up a business. The whole code needs thorough revision and reconstruction. [But] should not be abandoned.

Mwaba, a 1982 graduate, then a trainee accountant gave a scathing attack on the definition of a leader. He suggested who should be included in the leadership for whom the code should be strongly implemented. He stated:

> I strongly believe that this definition of a leader... is highly unscientific and indeed a deliberate attempt by the neo-colonialist government to conceal from the people of Zambia who the leader is.
>
> ... The question of a leader cannot be reduced to [the issue] of how much one gets, but rather [to] what position of public accountability one holds. Examples of those could be The President, Members of the Central Committee [and] cabinet, Ministers, General managers and Senior managers (by authority and accountability) of parastatal [organisations], government heads and senior civil servants.
>
> For these elements, the leadership code should be strongly implemented, not in its present form but rather... restated. The fundamental [issue] should be that the leader must not use his position to acquire personal wealth.
>
> It is my conviction that in its present format, the so called leadership code serves no useful purpose. [It is] no wonder it is not followed by [anyone in Zambia [including] the ones who drafted it!

A 1983 graduate, Lungu also observed:

> ...the leadership code...has largely been a failure and no one has followed [it]. This is largely because the "cut off" point in terms of...salary was so low [at] K2,500 p.a. such that even general workers qualified to be "leaders".

These views on poor definition were supported across the board including graduates who were studying abroad and businessmen. For example Kashoki, a 1983 graduate, then a senior assistant accountant rebuffed the code for

> [failing] to sensibly define who a "leader" is. Instead it pegs the identity of a leader to a sum of money.... This implies that almost every working Zambian [emphasis mine] is a leader and therefore subject to the code. This is, in my view, like drawing in the innocent to shelter the guilty minority- it leaves a lot of flaws. Unless a leader is precisely defined e.g. President, Ministers, MCC's Governors, MPs etc., it will remain a useless piece of legislation which is a mockery to the person it was intended to protect.

The same view was held by businessmen. Mubiana, a businesswoman in Lusaka's Chaamba valley, also thought:

> Leaders should be directors, permanent secretaries, commissioners etc. because the above people are policy makers and controlling bodies. Somebody earning K2,000 p.a. is not a leader.

Mushinge, a retired general manager of a parastatal organisation, then a businessman also found fault with the leadership code and limit of cash and bank deposits and rebuked policy makers:

> ... a sum of K2000 [limit as a bank deposit] is wrong form the beginning. Who is now a follower?... A leader has so many visitors who will come at awkward hours for example a bereaved family seeking assistance with funeral arrangements will go to him. How can he help them [without adequate finance]? When a leader has got money and property, he can guarantee loans for his area.
>
> Salary is not the criteria. It has been borrowed from countries which restricted it to the presidents, not to office orderies... Leadership code can apply to the president only....

9.2.5.2 BUSINESS OWNERSHIP BY LEADERS

Combined results showed that about 62% (out of 630) disagreed to the statement that leaders should not carry on any business while 30% agreed, and 8% were not sure. Breaking down the results, showed that responses of the three groups were similar and differences were not statistically significant. About 59% of students disagreed to the statement while 32% agreed. About 65% of graduates disagreed but 30% agreed. Businessmen's responses were 63% disagreeing while 28% agreed. Reasons advanced by code supporters will first be advanced, followed by non- supporters.

9.2.5.2.1 Reasons for Supporting the Ban on Business Ownership by Leaders

The reasons advanced by those who supported banning leaders from owning businesses were that the code was essential to:

1) Control the activities of leaders

2) Reduce abuse of power

3) Discourage inefficiency

4) Avoid exploitation of the common man

5) Limit concentration of ownership of the means of production in a privileged few.

8.2.5.2.1.1 Acts as a Control Mechanism

Among the code supporters, there was some feeling by a minority of 16% (out of 23) students, 21% (out of 23) graduates, and 77% (11 out of 14) businessmen who supported the code that some sort of code was essential to control the activities of leaders. But they recognised that leadership code in Zambia has basically suffered from lack of a control mechanism. A few thought that leaders could be allowed to own but not to manage businesses. Marais, a second year student was very critical of the lack of enforcement mechanism:

> "The seemingly well intended leadership code has suffered the death common to all measures and changes which are based on petty-bourgeois socialism. A leadership code of some kind definitely is essential in any society in which the leadership is serious and bent on developing it for the benefit of workers and peasants. In my view, the leadership code did not rest on a sound political and, ideological basis.
>
> One thing lacking in the enforcement of the leadership code is the control mechanism. It was assumed that leaders would check each other! However a 'disease' has affected all of them and has incapacitated anyone of them from taking a bold step to remove a log from the eye of the colleague without risking his log being removed first.... There lacks a medium in which the masses could without fear [or] favour point out any abuses occurring. The press may not publish exposures because it is controlled by UNIP [The ruling party in a one party state]. A few years ago, Newsweek magazine was withdrawn from circulation for publishing the wealth of some leaders.
>
> There is also the question of the cultural backwardness of the masses of peasants and workers, a factor which in real terms disables them from participating actively in political affairs....

9.2.5.2.1.2 Reduces abuse of Power

Commenting on the need to curb abuse of power, Phiri, a second year undergraduate, for example, felt there was a need for leadership code to encourage leaders to be efficient and dissuade them from abusing their positions:

> .... Another factor to consider is that of misuse of both government and parastatal funds, tools, vehicles, personal etc. Most leaders as has been the case, have a tendency of misusing government property including personnel for their own selfish motives".

9.2.5.2.1.3 Discourages inefficiency

Other reasons mentioned by a few persons in supporting the code included inefficiency which would result if there was no code due to conflicting fiduciary interest. A second year graduate, Phiri, for instance, felt there was a need for leadership code to encourage leaders to be efficient and dissuade them from abusing their positions:

> I feel that leadership code should be fully enforced. ... If leaders are allowed to start businesses, this will result in a drop in efficiency in the running of Government and parastatal organisations. For instance, if I was a leader I would dedicate more time to my business than to the [official] work ... to ensure the smooth running of my business. After all, losses in Government and parastatal organisations can be offset by government subsidies, loans etc. whereas a loss in my own firm would have terrible consequences on my financial position.

Similar views were also expressed by businessmen regarding the need for leadership code. Chibesa, a Lusaka businessman agreed with the views that a leader would be inefficient if he was running business. He said:

> If a person chooses to be a leader he should not think of other things. He must concentrate only on his national duty. [If such leaders] want more money they must go into private business instead of going into the government because if they do so they will have to follow national policy.

The government officials regardless of office are there to serve the people. They can't serve two masters at a time.

Some thought that a leader should be free to keep any amount in the bank. But a leader should not be allowed to carry on business because you can't serve two masters at a time. Chamunda a Lusaka businessman questioned:

> How can he devote his time to people if his interest also lies somewhere else? A leader could be in a position where he uses it for self gains. [But a leader should not give up property]. Why give up property if tomorrow he will leave [the leadership position]?

9.2.5.2.1.4 Avoids exploitation of the common man

Even those who supported the leadership strongly criticized the dishonesty of leaders. They further accepted that leadership code had failed. But they were convinced of the noble purpose of leadership code. Eagger, a first year student defended the code when he said:

> The leadership code's ...purpose ... is very progressive as far as prevention of exploiting the citizens is concerned. This stops leaders from amassing more wealth [at] the expense of citizens who pay them through taxation of the already small salaries. However, it is very unfortunate that here in Zambia, it is not effectively implemented because of lack of control measures to check dishonesty leaders.

Solanki, a second year student accepted that the code was not effectively practised. But he argued if it was,

> it would help towards development. Allowing leaders to own businesses is quite retrogressive since .... Leaders are the ones who are supposed to implement the humanist ideology. Hence by allowing them to own businesses, they are at the forefront of exploiting the masses...

9.2.5.2.1.5 Concentration of means of production in a few hands

Mweene, a 1984 graduate, an assistant accountant brought out clearly the two main points for the need of code:

> The leadership code itself ... is well-intended. First and foremost, it seems to discourage concentration of ownership of the means of production in a privileged few - a way of checking capitalism. Moreover, it should make it difficult for those in leadership to abuse their positions by way of official corruption.
>
> I however, see a number of loop holes in it's implementation. The greatest difficulty is making sure it is faithfully practised by all in the country.

9.2.5.2.2 Reasons for not supporting banning of leaders from owning businesses

Several reasons were advanced by critics of the regulation of banning leaders from owning businesses. The first common reason offered by 62% (128 out of 208 of all respondents commenting on this issue) were that leaders, [those who earn at least K2,500 annually], are the people who have capital or access to capital. This was distributed as 70% (41 out of 59) students, 57% (50 out of 88) of the graduates and 63% (37 out of 59) of the businessmen (see table 9A.9). Asked for a second reason, 44% (57 out of 129) stated that it existed only on paper (meaning it was not followed). This was distributed as 44% of students, 51% of graduates and 31% of businessmen. Among the second reasons, the next one with the highest proportion 21% of all respondents was that they were capable of running the businesses (17% students, 15% graduates and 36% businessmen). The others among the second reasons were that Zambia was a capitalist economy (12%); and that a leaders has been poorly defined (11%). The reason of existing on paper is discussed when the issue of whether leadership code is faithfully practised in taken up.

8.2.5.2.2.1 Leaders have got Finance or means

There was a strong view that leaders are the ones who have got the money or means and should therefore not be stopped from owning businesses (refer to chapter 3.4.4.3 for similar arguments by this researcher). Irvin, a second year student, strongly felt that leadership code should be abandoned because it discourages people with money. He rebuked political leaders for their policies and dishonesty as:

> Zambia's socialist ideas have not proved fruitful so far. If anything, they have led the nation into economic decay.
>
> People with capital and knowledge are barred from running private business leaving it to a very few individuals (mostly foreigners) and multinationals.

Lending his support to modify the code so that the leaders who have financial means or contacts own businesses, Lupili demanded:

> The leadership code should be modified to a point of flexibility. After all it is these very leaders who have the greatest business contacts both inside and outside the country. What is wanted is a germination of some business enterprises so that more employment opportunities are created.

A second year student, Nazikana, called for revising of the leadership code to allow leaders who have got the capital to invest in worthwhile ventures. He said:

> I strongly feel that the leadership code should be revised so that it allows the so called leaders to invest their monies in productive ventures. It should not prohibit them from having businesses which can improve the economy and create employment.
>
> It is these 'leaders' who have enough funds to invest and if they are not permitted to invest, they might just spend it on consumable goods or engage in illegal ventures. All the leadership code should do is to prescribe productive ventures which 'leaders' should engage in.

Chembe, a third year student strongly criticized the whole essence of the code. He challenged the government whether it made

sense to stop people who had the means of setting up businesses when he forth rightly said:

> Whether the leadership code does or does not exist it has, in my opinion, outlived its usefulness. The code, if it does exist, only does so on paper and never in practice. ... It is nó longer a secret that most of these people are the owners of most of the flourishing businesses and firms we see around the country. Common sense will allow it to be so since these people have the resources necessary to keep our economy ticking. Thus although the code forbids them to engage into such ventures, it only proves its own irrelevancy.

This view that leaders were the ones with capital or means of acquiring it was also shared by most graduates across graduation years. Shoeman a 1982 graduate, then a distribution controller paused the following question and then clarified as:

> If only the have-nots are allowed to carry on any business, the question is how do they acquire the capital? .... The haves have enough money as well as contacts to be able to start small or in some cases, big businesses.
>
> If we allow them to start businesses, we would not only create employment, but also reduce poverty as those to be employed will be bread winners. The demand will be less and prices [will be] down for the majority of the citizens to buy.

Chipeta, a 1985 graduate, also emphasized the same points, but he added that this class was one of the few credit worthy groups in Zambia. He argued:

> ...Leaders are the people with the [right amount] of money [to] invest profitably. They [also] have access to funds in form of loans from commercial banks as they have security.... These people are a class we can regard to be quite credit worthy. There are very few privileged indigenous Zambians (as compared to foreigners and other [naturalized] Zambians of Asian origin etc.) who fall in the class of people who can be termed credit-worthy [or] who have amassed enough capital to go into business. Of these very few Zambians most of them are leaders or have been leaders at one time or another...
>
> From an economic point of view, I do not see any reason why these people should be restricted from owning businesses.

The view that leaders were the ones with the required capital or means was shared by businessmen (women). Mubiana, a businesswoman from Lusaka's Chaamba valley, was surprised at the law as if

> This was written for aliens. This law is not applicable to indigenous Zambians. It is not suitable to the Zambian environment... These people [leaders] have got more contacts to easily set up businesses. Leaders should also be given a chance to own businesses because they do not hold their leadership positions for ever.... They can be sacked any time.

Mushinge, a retired general manager of a parastatal organisation, then a Lusaka businessman also agreed with the view that

> These type of people [leaders] have got all the requirements banks look for. If we don't use these people, we will suffer. Look at our neighbours even the governor of the Bank of Malawi has a very big farm. If he [leader] has all the facilities, there are less chances for him to steal. Why should he steal? It also goes back to security of employment.

9.2.5.2.2.2 Leaders are Capable of Running Business

The second reason advanced by non supporters of the code was that "leaders" (as defined by the code) were most educated, capable and experienced group among Zambians. A third year student, Mpatisha, held that since leaders were an educated section of the Zambian society, they were therefore capable of managing businesses. He also touched on the insincerity of leaders, which is discussed later. He said:

> Leaders are (some) of the most enlightened members of our society and should hence be allowed to run small industries as long as they don't abuse their authority to get favours for their industries.
>
> The present restrictions are not effective and work only to annoy the masses who are aware the code exists only on paper. It is better for leaders to come out in the open and associate themselves with their property rather than employing foreigners to run them on their behalf.

Mushinge, a former general manager of a parastatal organisation, then a businessman, was also one of those who believed that leaders had all the qualities banks looked for added:

> A leader is a knowledgeable person. He has the ability to organise the people [and] can listen to him. He has a certain status in a community in which he lives. He has the ability to command all the factors of production. You retard development in that area. A leader should be allowed to do what he wants in his spare time.

9.2.5.2.2.3 Deprives the Country of Experienced and Competent Political Leaders

Another view advanced by some respondents such as Mutengo, a 1984 graduate, then an assistant accountant, was that depriving the political leadership of competent veterans would be constraining development of the country generally:

> I feel the code should be relaxed ... [since] there are a lot of businessmen with good leadership qualities, who would be good political leaders. But because of the leadership code, they are discouraged from taking up political positions because [they fear] they would lose their businesses. Indirectly, the nation is then deprived of good leaders.
>
> Let the people... keep their property even when they [become] leaders as long as they discharge their duties well. Their combined roles might just be what is required for an improvement in development.

Longwe, a 1984 graduate also felt:

> The leadership code should not be so rigid as not to allow people in political leadership to own property. Sometimes the code discourages able leaders... who may have acquired property faithfully... becoming leaders... for fear of losing their property.

9.2.5.2.2.4 Deadwood Leaders Cling to Leadership Positions

The feelings expressed by students and graduates about depriving the country of the most abled leaders were also shared

by businessmen. In addition they argued that dead wood leaders tend to cling to power, as stooges to ineffective policies, as their future was insecure. This in turn was detrimental to the development of a nation since new ideas were stifled in the process of need for survival (by remaining in power). Kaombe a Lebanese born Zambian Lusaka businessman who believed that 15% of the national economy (private firms) kept the nation alive, but this policy has not been changed because leaders do not know what they are doing argued:

> Leadership code creates an atmosphere of secrets and secrets create rumours and rumours are bad [for a country]. [Further], it is because of the leadership code that many leaders are forced to cling on to power. This must not be allowed [to happen] as the leaders become stale. They can't think of national duty any more. There are many leaders who not deserve to be leaders. But because they are insecure as regards their future, they try by all means possible to cling on to power.
>
> I believe a leader should not dispose of any property. It is his. This has a negative effect as they will become paupers in the future if they are out of employment as such they try to retain their power even if they are ineffective....
>
> The leaders should be allowed to carry on businesses because it is only by doing this that we can gauge their potential. If they can run their businesses well, then they can run the ministry smoothly. I know of many ministers who have failed in business because they can't think. Why then should such people be retained in the government? I have been a party member for so long and I know all of them. This is why I am saying so.

The notion of allowing leaders to run businesses so that they get used to the hard life and realities of business management thereby discouraging deadwood leaders remaining in public office was emphasized by Mushinge. a former general manager of a parastatal organisation when he said:

> ....Another weakness of [the code] policy makers [did not foresee] is that very few people can survive after leaving a job. [This is so because] he is not used to running a business or type of life. He has no option but to go back to beg for the job. Thus even after retiring, he will still go

> back. I can tell you this is true [because] among the 20 leaders I know, who had retired, 15 have gone back to work. The code wanted to make everybody poor. If a person is poor, he can easily be controlled.

Kopa, a Lusaka businessman concluded the issue of robbing the government of good leaders from the business community while keeping in public office leaders who have reached the highest level of incompetence as per Peter's principle when he said:

> From economic point of view, there are [not many] businesses in Zambia. [Therefore] anyone who wants to go into business should not be discouraged. Another temptation is that politicians may want to cling to the position.... If he is made to dispose his property, he has burnt all the bridges. So he cannot go back [underlining mine] except remain in office [underlining mine].

9.2.5.3 SUBLETTING AND DISPOSING OF PROPERTY BY LEADERS

It will be recalled that when asked for their comments on the statement that a leader should not sublet his property, including his house, about 64% of all respondents disagreed while 28 agreed. This was broken down as 55% of the students disagreeing, 30% agreeing and 15% not being sure. The graduates' responses were 62%, 30% and 9% respectively. The proportion by businessmen was significantly (0.0004) higher as 75% disagreed while only 16% agreed (table 9A.10).

On the statement that a leader should dispose property to others on assumption of office, 79% of the total disagreed, distributed as 75% of both students and graduates disagreeing, and almost 9 out of 10 (86%) of businessmen disagreeing. But 19% of students and 17% of graduates and 8% of businessmen endorsed the statement. Thus more businessmen disagreed and results were significant at 0.0047. Code supporters argued that this requirement was still susceptible to too many loopholes as the

possibility of corroborating with the buyer was still there. Allowing children to own businesses does not eliminate parents' involvement. Mweene, a 1984 graduate for example highlighted this problem when he said:

> On the disposal of assets by a leader...I still see a chance of...working in league with whoever...the leader...purportedly sells his assets to (even if those persons were not the leader's spouse or children). Further, if the leader's children were allowed to have their own businesses, I feel it would still be difficult to establish the fact that their prosperity [was] not a direct result of the leader's position in the community.

Other supporters of leadership code however thought that those who acquired businesses and property before attaining a leadership position should be excluded from the requirement of disposing property. Haambole, a Lusaka businessman agreed with the general principles of the leadership code. But he preferred exceptions for those nearing retiring age to prepare themselves for the future. He did not agree with disposing of property. He observed.

> If a leader is allowed [business ownership] while in employment, this brings in inefficiency. ... [But you should not dispose the assets because] you acquired those before. If you dispose, you will have no where to settle. If [you get] enough income from property, you can continue earning the income while serving the nation without a salary, but [getting] allowances only.

All respondents were asked for their views on the suggestion that a leader should be allowed to dispose property to any person including members of his family, a majority of 88% of all respondents agreed. The composition was: 81% students, 83% graduates and 81% businessmen, but a small proportion of 31%, 28% and 14% respectively disagreed. The differences were significant at 0.0002.

Views supporting the notion of property ownership have been presented above. However some code supporters emphasized the need for leaders to concentrate on serving the public. Some such as Bell and Chapewa deplore the recent (1988) National Council resolution which excluded spouses and children. Bell campaigned for leadership code and restriction of property ownership as:

> A leader is an individual who should, in all categories, be regarded as a moral person. ... Hence, the leadership code must be strongly enforced without reservation.
>
> In the last National Council meeting, an agenda was adopted to allow spouses and children of the leaders to own a business. This is not only scandalous but it is a fallacy. What do the politicians think the ordinary man will think of them? As Africans in general and Zambians in particular, and Knowing our influence over our wives and children, it becomes a blue lie to ... adopt such resolutions. [This is so] because the dominant husbands / fathers] will be directly running the companies so formed.

Unlike respondents such as Bell, other code supporters while deploring recent amendment thought that it was just fair to accept leaders who had owned businesses before assuming office. He argued:

> The leadership code was created with good intentions. ... However I find it difficult [to accept] in cases where some one becomes a leader [after] he has already been in business in his private life. In such exceptional cases, it is only fair [to allow them] to own their businesses as long as they are not directly involved in the management of their businesses....
>
> After all, history has proved that there is more reliable leadership from a leader of sound economic background compared to [his counterpart]....
>
> However the recent amendment to the leadership code... makes me doubt its future effectiveness. If wives and children of leaders are excluded,... it is just as good as allowing leaders to carry on business. How do you separate a wife and children from a father who is a leader when in most, if not all, cases he is the source of finance? The recent amendment has nullified the code and it will never work.

But others such as Maladi, a second year student however said:

> [In addition] I am against that section which [prohibits] spouses and children. We shouldn't allow children of leaders who after entering manhood... start roaming the streets, [when they] don't get employed, when his parents would have easily given him/her their property.

Asked about whether a leader should be free to decide what to do with his assets, an overwhelming majority of 8 out of 10 of all respondents agreed. The composition was: 78% students, 79% graduates and 90% businessmen. A small percentage of 14% (17%, 16% and 7% respectively) believed that a leader should not be free. Differences between SBIS respondents and businessmen were significant at 0.0131. In support of their responses, respondents referred to the need for well-tested leaders by arguing that depriving the political leadership of competent veterans would be constraining development of the country generally. Quotations have been given above which explain why respondents felt that they should be free to decide what to do about their assets. These included observations that some may have acquired property before becoming leaders, able leaders are discouraged to offer their services to the country and that such requirement leads to misery which will be discussed later.

9.2.5.4 HONESTY IN ABIDING BY THE LEADERSHIP CODE

All respondents were asked to indicate their level of agreement or disagreement to the statement that "leadership code is faithfully practised by all". There was a unanimous disagreement to the statement by 84% (526 out of 630). Only 4% agreed while 13% were not sure. A proportion of 89% of both students and graduates, and 72% of businessmen disagreed. The

difference between SBIS and businessmen, which was statistically significant at 0.0000 (table 9.6), was due to some fear by a few foreign businessmen as explained in methodology chapter 5. It will be noted in table 9.6 that more of them were cautious and selected the "I don't know category". It is however clear that respondents believed that leaders were dishonesty in abiding to the leadership code. It will also be recalled that this was identified as a distinct factor in Factor analysis.

Table 9.6 CHI-SQUARE ANALYSIS OF WHETHER CODE IS FAITHFULLY PRACTISED BY RESPONDENTS' CLASSIFICATION

Code is Faithfully Practised By All	Type of Zambian Respondent			
	Student	Graduate	Businessmen	Total
	No. Row % Col. %	No. Row % Col. %	No. Row % Col.%	No. Row. %
Disagree	161 30.6 89.0	225 42.8 88.6	140 26.6 71.8	526 83.5
Not Sure	15 18.3 8.3	24 29.3 9.4	43 52.4 22.1	82 13.0
Agree	5 22.7 2.8	5 22.7 2.0	12 54.5 6.2	22 3.5
Column Total No. Column Total %	181 28.7	254 40.3	195 31.0	630 100.0

X^2 = 28; P = 0.0000; Cramer's V = 0.15; No. Missing = 23

In their supplementary comments, respondents across the board were very critical and bitter about what 44% (57 out of 129) offering their second reason for not supporting the code termed as "cheating" or "existing on paper". In most of these comments, they called for abolishing it. These strong comments were common across the three responding groups as a few quotations from each group will show. Simbeye, a first year undergraduate was clear cut in his observations when he concluded:

> It does not need a lot of investigation for one to see that the leadership code does not exist. I don't see any reason as to why we should claim to follow something that, in my opinion, does not exist [underlining mine]. For this reason, the leadership code should be abandoned and everyone should come out in the open [underlining mine].

Maladi, a second year student also felt that the code should be scrapped since it has not been effective, hinders development and leaders have the means. In addition he complained:

> The leadership code ... still exists but ... most, if not all leaders, own most of the successful companies we see around ... It makes no sense ...
>
> ...worse still, some of these were in fact strong advocates for this instrument.... What should happen is either scrap it off or try to change it a bit so that it suits our own environment.

Mtonga, a 1982 graduate, then a sales manager repeated the same charges. Leaders were said to apparently have accepted business ownership as long as they disguised themselves. He said:

> The code has not achieved the purpose for which it was enacted.... Most leaders own property and business concerns under various names, some of [which] are registered in relatives' names and others in friends' names.
>
> This is a well known fact even in the circles of power in government and apparently has been an accepted fact as long as one's property is not in his / her name. This being the case, it would be better to scrap it and allow leaders to publicly own businesses....

These strong feelings that the code was so much flouted by leaders that the led could no longer embrace their teachings and hence the calls for scrapping it were also widespread among all graduates in various years. A 1985 graduate, John, who was an accountant felt very upset about this issue when he emotionally exploded:

> The leadership code is massively abused in Zambia for it to be effective. It is even embarrassing for one to stand in public and propagate the merits of the same.
>
> The most [serious] weakness with the code ...is that in Zambia some people are more equal than others. ... Therefore in any community, the world over, it is difficult if not impossible to enforce laws as long as others are above it. On the face of it leadership code is very appealing for it is meant to evenly distribute the nation's wealth among all its citizens.
>
> But if we [were] to critically analyse all the leaders, the fact we [would] discover [would be] very shameful. People are [therefore] justified in concluding that the so called leadership code is nothing but total hypocrisy. For instance, who among the current leaders [does] not carry on any business [does] not sublet his property? ... Lies won't help us in nation building especially if lies descend from ... leaders to the led. Most leaders if not all of them have diverted grossly from the guidelines of the leadership code. That is why at the just ended National Council (UNIP) [of 1985] few amendments were pushed in, all in a bid to take remedial action to save the already shameful state of affairs.... It was increasingly becoming difficult to preach to the unenlightened masses about the ethics of the code while actions of leaders [were] grossly [the] opposite.

The reasons for the strong attitudes expressed by respondents on the ineffectiveness of the leadership code were brought together by Shiaka, a 1985 graduate who was then an assistant manager when he bluntly stated:

> My indifference on this topic stems from the fact that in Africa, it is one thing to have a policy and it is another to implement the policy. The leadership code is actually paradoxical. ... In the event of death or loss of employment how then does your family survive?.... The leaders who have strictly followed the leadership code are a bad sight after loss of employment...

> On the other hand, private investment is encouraged. Who else can invest with the necessary capital apart from the same people who are termed leaders? So people have naturally been playing hide and seek.... In my opinion you cannot have a leadership code in a mixed economy unless in a communist country. Even this communist country must be one where criticism is allowed and not dictatorship,... where you are allowed to criticise as long as you agree with the ruling class.

To highlight the frustrations of the general public resulting from leaders' failure to abide by the leadership code and lack of communications' channels about the issue, Ngambi a 1985 graduate complained about government's inability to conduct

> ... investigations and assessments... to verify leader's wealth. [Attempts by individual office bearers such as the] former leader of the Industrial Participatory Democracy Mr. Kwibisa to publicise various wealth holdings [meet] negative response from leaders of all aspects of our society. In the light of this how does one support the present nature of the leadership code?

The views that the code was not practised, failure of the government to publish Kwibisa's report were also expressed by businessmen. Kainga, a Lusaka businessman also added added:

> We are cheating ourselves. It only applies to simple people and these may end up in jail. The big shorts go scot-free [as] they are not affected. It is common knowledge that leaders own businesses. Why hasn't Kwibisa's book on "who owns what next door" not been published? No! [The code is not faithfully practised]. This is why the book has not come out. These days it is now quiet [talking about leadership code]. Nobody talks about it.

To emphasize the flouting of the code Mushinge, a former general manager of a parastatal organisation, then a businessman concluded:

> ....No person except one has obeyed the leadership code... Leaders are owning Cairo road. Kwibisa has written a book on "who owns what next door." It has not been published. It will not be published. For example who owns Londe Hotel? why [is this the case] if leadership code is honestly practised?

9.2.5.5 CONSEQUENCES OF LEADERSHIP CODE

All respondents were asked to indicate the level of agreement or disagreement to a statement that leadership code discouraged business formation. About half agreed that it did, 34% disagreed and 15% were not sure. Respondents also offered extra comments. Categorisation of these revealed that among the first consequences of leadership code, the main one advanced by 40% (78 out of 192) was that it discouraged economic development. This was distributed as: 42% students; 55% graduates and 20% businessmen (see table 9A.11). The next one listed by 16% was that it discourage indigenous businesses since the people with money were not allowed to form businesses. The individual proportions were 16%, 12% and 20% for students, graduates and businessmen respectively.

Among the second consequences, the main one highlighted by 39% (40 out of 102) was that it led to misery upon retirement by leaders (15%, 24% and 78% of students, graduates and businessmen respectively). This was because it encouraged consumption at the expense of saving and investment in the country. The next one indicated by 18% (50% students, 11% graduates and 8% businessmen) was that it led to increased unemployment. Others discussed included encouraging capital drainage from Zambia to foreign countries (14%) where leaders felt secure to commence businesses. These views are now picked up for detailed discussion.

9.2.5.5.1 [illegible]

A proportion of 51% of all respondents believed that the code discouraged business start ups. Those who disagreed were 34% while 15% were not sure. The distribution was: 51%, 54% and 45% for students, graduates and businessmen respectively who thought so. But 34%, 36% and 33% did not believe so. The last group embraced two views. One view by a minority of code supporters such as Mweene, a 1984 graduate, then an assistant accountant was that

> ... leadership code wouldn't discourage people from starting up businesses because they have the option [underlining mine] to either retain their leadership positions or go into business.

The second view shared by both code supporters and non supporters, which provided the main reason for believing that the code did not effectively discourage business start ups was that practically it "existed on paper". This was shown above by 44% (57 out of 129) of those who provided reasons for not supporting the code. Respondents such as Brooklyn, a third year student and a code supporter explained some of the problems respondents had in ticking a particular column on the attitude statements regarding whether the code discouraged businesses, should be abandoned or enforced. He had in fact strongly disagreed to the first of these two statements. But he had strongly agreed to the last statement. In his supplementary contributions he stated:

> I have found it quite difficult to state my opinion on (g) and (h) [The code discourages people from starting businesses and the code should be abandoned] because the leadership code in Zambia is just there on paper and does not exist in reality. This has further been manifested by the non-publication of the findings [Kwibisa] enquiry.

Another code supporter, Soko, a 1983 graduate who was a trainee accountant studying in London, specifically argued:

> Every cloud has got a silver lining ... The fact that the code has been poorly followed does not render it useless.
>
> On the other hand, whether the code is abolished or not, there would be no difference at all regarding the cause of the small scale industry because I believe that no one can argue in good faith that he has been disadvantaged by that piece of legislation.

Mr. Patel, a third year student, thought that the code was there merely to woodwink the public. His view was that what was forbidden was registration of a business under a leader's name since most leaders owned businesses. He candidly put it this way:

> In my opinion the Zambian leadership is a ... toothless bull dog, with no influence whatsoever. Plausible as its provisions seem to be, in reality, these... are never followed at all.... Despite the fact that no Zambian leader is allowed to own business, they... do actually own businesses only that these businesses are registered in other people's names. So it is illogical to blind the public by shamelessly telling them that no leader is allowed to own business. Further, the code is merely comforting the toiling masses that ... the Zambian leaders... like [them] do not own any business at all - which is actually a fallacy. Therefore, it does not make any difference whether the code is there or not....

The same views were expressed by some businessmen. Kaombe who had disagreed to the item explained:

> Leadership code has forced leaders to do business behind closed doors and as such I feel it does not discourage anyone from starting up a business because all of them from top to bottom have businesses.

But more respondents (50% as seen above) thought that in principle and for law abiding citizens (who suffered severe hardships later), the effect of the code was to discourage business formation. Kauma, a Lusaka businessman, for example, believed:

> Preventing the leaders from engaging in business is killing the country. The people who are leaders are the ones who should set up businesses because they are the ones who have money. In countries like USA and U.K., leaders are encouraged to engage in business and this explains why they are developed.

In support of claims that to some people, the code was a deterrent to business formation, one Lusaka businesswoman who had a small size cloth manufacturing firm but had to stop work as required by the code confirmed:

> I started in 1975 with small type ...leadership could not allow me to continue working. When I stopped working, I had one industrial machine. I bought three, then I bought one later.

Kanyemba, a third year student had this to say on the effects of leadership code on business formation:

> ... most people with small businesses are salaried employees of big firms. The money they get from their salary is what goes into financing their businesses. [But] it is these very people who are considered leaders under the code. They create employment opportunities for [the less fortunate people]. ...
>
> But if the code was strictly enforced, the moment the manager ventures into some business, he should [quit his job]. This would [lead to] difficulties in finding money to develop his business. Thus it would discourage people who can form [businesses].

Kawimbe, a 1982 graduate, then an accountant thought that the code [which] existed on paper did not discourage large business owners, but small businessmen since:

> ...It is common knowledge [that] ... The code only deters "small leaders" and could be responsible for retarding the economy as people who have capital cannot freely invest it because they feel they may be contravening the code.
>
> If the leadership code was supposed to make socialists or marxists out of "leaders", it hasn't worked and should be abandoned now.

Lungu, a 1983 graduate called the attention of policy makers to:

> The most important [issue] at the moment [which] is that if one wants to start a small business, he must either have... own saved money or borrowed loan capital. It therefore meant that with the leadership code, no one could

have been able to save in excess of K2,000 in a bank, which money is not enough for starting a business venture. The leadership code [therefore] only provided one option [which was] borrowed loan capital with its problems of servicing.

Therefore, in my opinion, the leadership code creates an atmosphere of dependency [emphasis mine] on lending institutions and indeed not conducive to emergence of small business ventures [which depend on personal savings].

Clavel a 1983 graduate, then a management accountant also agreed with Lungu on constraining effects of the code on

> ... proliferation of small scale industries...[by] barring the so-called leaders who have access to finances... On a conclusive note, Zambia's economic set up is capitalist and therefore it is hypocritical to implement such socialist laws as leadership code because they simply cannot work in a capitalist set up. A square pegge cannot fit in a round hole!

The extended view of discouraging businesses was that the code effectively encouraged foreigners to control the economy. Kapungwe, a 1983 graduate, then a branch manager criticized policy makers for encouraging foreign ownership of businesses at the expense of indigenous ownership when he said:

> The leadership code in its present format inhibits promotion of business growth as it prohibits those with the money from injecting it in the economy and thereby creating employment. By restricting the title of leadership to those in government and parastatals only, the government leaves expansion of the economy to the private sector which in most cases is externally controlled. In short, the leadership code inhibits indigenous ownership of business enterprises.

Chibowa, a 1981 graduate, who was then a commercial and industrial secretary agreed with this view of the possibility of a foreign controlled economy but also mentioned its consequences:

> ... since most people who fall under the category of "leader" are indigenous Zambians, the economic base/power has eventually been left in the hands of the aliens. The trend has a bearing on the political outlook of the nation i.e. these aliens or economic giants are capable of influencing our political policies through their capital.

9.2.5.5.2 Leadership code constraining Economic Development

The consequences of leadership code were related to the wider issue of discouraging economic development of the country as 40% (78 out of 192) respondents indicated, in their supplementary comments. Lupili, the 2nd year student who had advocated for flexibility in the leadership code also criticized the code because it discouraged economic development he thought since:

> Many leaders have financial assets in both kwacha and foreign currency but for fear of relinquishing their assets ... they hide their 'true identity' [and] ...the amount of assets they own. [Since] these financial resources lie idle, development can not take place. [This is so because] funds that are supposed to be invested are stored away [emphasis mine]. If there [is] any investment done, it is so clandestine such that the government does not earn revenue through taxes.

Mwape, also added his voice to the need of investing in business in order to develop the nation when he condemned leadership code and advised:

> The leadership code discourages development in a poor country like Zambia. Leaders are the ones who have money. ... Now if the money is just left idle in homes of MCCs [Member of Central Committee] or Ministers or heads of Parastatals, how do you hope to develop?

The question posed by Mwape was answered by Mthenga, a 3rd year undergraduate, when he forthrightly responded:

> The level of investment in a country will imply the level of development. Investment can only be done by sectors, in the economy, with capital. Zambia, as a country with capitalistic tendencies is characterised by capital (money) resting in few hands...(the leaders and a few other businessmen). The leadership code then prohibits money ... [from being] pumped into the economy for development.

Geneous, a first year student, was very critical of the government's policies. He boldly challenged the government:

> The code has been a result of some other mistakes namely one party-state style of government. [others have been] illiteracy ... lack of interest / awareness that has [existed] among the majority of the country's population in their civil / political rights. ....

> The party has taken advantage of [these] to try to appear good while long term results of its deliberations [and actions] are fatal to the healthy running of ... the country. ... Let politics be politics. Economic issues should be handled in an economic manner. ...
>
> How we are may be among the most lazy people the world has seen. [It is no wonder] why others have profited by our lack of fore-sightedness. In trying to mend up [our problems], there is lack of cohesiveness in all deliberations... You simply wonder if the so called government is going to play [the] 'we know-best' part all along. ...

Some respondents such as Muntemba, a 1983 graduate, advised against leaving the building of the economic base to the have-nots since that would take too long:

> .... If we leave everything to [the] common man, it will take us a long time to have businesses [which are] owned by indigenous Zambians....
>
> I am not very... inclined to support the belief that if leaders are allowed to own businesses, there would be a lot of exploitation, laziness, thefts, etc., because there are several other better ways of combating these weaknesses.

Businessmen expressed similar views. For example Mwiinga, a Lusaka businessman, deplored the whole principle of the code when he said:

> If I have made money, [it] should be invested instead of consuming it. ... how do I accumulate money to develop? ... It doesn't make sense [when]...I have laboured to become a leader. What they are encouraging in laziness [emphases mine]. Any person with five senses can't agree. ... [At present] a person who works hard is being punished for working hard by requiring [him] to surrender.

Kopa, a Lusaka businessman finally left policy makers with a puzzle to ponder about and solve when he observed and advised:

> From an economic point of view, there [are not many] firms in Zambia. Any one who wants to go into business should not be discouraged.... If restriction of building [houses] was not done, there should have been more houses [and] less rent than now. For example in Lusaka, you can't rent a reasonable house for less than K2,000 a month!
>
> [Therefore] the basic test of the necessity of the code is to determine what benefit we get form such a policy.

9.2.5.5.3 Leadership Code Encourages Capital Drainage to Foreign Countries

The third issue raised as a second consequence of leadership code by 14% of respondents who offered views on this point was Capital drainage to foreign lands; Sessia, a first year student lamented:

> ...Leaders... have a lot of businesses operating undercover ...have idle profits lying in foreign banks in order [to appear] to fulfil the code....
>
> I feel if this bankrupt blindfolding, resource-wasting and misleading policy could be removed, [this] money could be used to develop small scale industries where a lot of people could benefit.

The same views were shared by businessmen. Kainga for example questioned and observed:

> ... Where can he put the money if he sells his car costing K50,000 today? Should he booze up his money? Some keep money even in Switzerland [but] are stopping others to keep in the bank here. People are [now] keeping money in their houses instead of reinvesting in development of the small scale sector.

Lewanika, a 1983 graduate who was an assistant accountant studying at Buckingham University in London commented:

> The leadership code is some ridiculous law nobody observes.... [It is] a product of political confusion. To save their faces they have taken all the country's money into banks in Europe and they also own businesses outside the country.
>
> .... [Hence the] code strictly speaking gives incentives for corrupt leaders to invest their money abroad....If it is true that at independence, there were few [indigenous] businessmen in Zambia,..., that we are crying for investments,... that foreign firms will end up remitting the profits, then I [would] prefer a code that encourages local [emphasis mine] capitalists to foreign ones.
>
> The other question is: who does this leadership code serve? If it was meant for restricting leaders from amassing wealth, has it really achieved its objective? What is wrong with a leader genuinely acquiring property, any way?
>
> An average person in any country is not concerned with ideologies but with how to feed his family. Politicians should redirect their efforts to this noble cause.

9.2.5.5.4 Leadership Code Discourages Creation of more employment opportunities

The problem of unemployment was highlighted by 18% of respondents commenting on the second consequence. This however underestimated the proportion since many respondents commented on this issue as it may have already been noted from various quotations. But as in the other cases, one response per category was accepted. For lack of space no detailed discussion will be presented here. Respondents however shared similar views on the social effects of the code. For instance, Brown a first year student, noted:

> In Zambia, where unemployment [of] the youth is the talk of the day, leadership code should be discouraged at all costs because this will prevent the socially privileged minority from investing their capital in business enterprises, hence making the situation even worse

9.2.5.5.5 Leadership Code Leads to Misery upon Retirement

It was shown above that 39% (40 out of 102) commenting on consequences argued that it led to misery after retirement. The composition of this proportion was 5% students, 24% graduates and 76% businessmen.

The reasoning was that the code encouraged consumption at the expense of saving and investment. There were strong feelings that the few leaders who followed the code to the letter turned into beggars later in their lives. This was seen as inequitable for persons who had served the country for many years while those who championed the cause continued prospering. They strongly emphasized that since some leadership positions were not permanent, leaders should not be made to lose all their assets because that would be self destructive. For example Kunda, a 1982

graduate, then an assistant accountant argued:

> .... What is important is not how much wealth a leader has, but how he has acquired it. ... Leadership is not a permanent job. So why should one lose all his assets after acquiring [a] ministerial post? Leaders should [only] be discouraged from obtaining wealth through unscrupulous means.

Lukonde, a 1982 graduate, then an assistant accountant, agreed But went further when he observed:

> Employment of leaders depend very much on appointments, which can be withdrawn anytime. [Therefore] to deprive a leader of private property is deliberately making him a destitute when ... [leaves] the system. Property is no hindrance to effective performance of one's duties. A person who can effectively direct his business can in most cases be a good leader if he is not overtaken by greediness.

Bodalia, a 1983 graduate, then cost accountant on study leave in the U.K. agreed to the impermanence nature of leadership jobs, adding this justified business ownership for security:

> ....it would be self destructive for an individual to adhere to the code. He should provide security for himself and the family.... The most common method is to run own business whilst being a leader.

Other respondents in fact thought that most people became leaders through economic wealth. Katema, a 1983 graduate who had advised that leaders can own, but not manage businesses stated:

> I feel that the leadership code is retrogressive in terms of our country's development. [As an] example, Mr. Sata, the Lusaka District Governor was a very active businessman in Lusaka before he became an M.P. [and later a] Governor. Therefore ... Mr. Sata [would] be denied the opportunity [of] exercising his ability of offering special services to the nation.
>
> [The reality is that] many leaders become leaders through economic wealth. Therefore it is unfair that such leaders part away with their wealth which they have worked for so hard to obtain ....

Mwiinga, a Lusaka businessman working with Zambia Airways, who had advocated to allow leaders to own businesses (while in employment) until they were established thought that leaders were

owning businesses for security and survival:

> Anybody who is working wants to save money for rainy days. Pension is not enough to support a person and his family including the extended family. ... I for example get about K1,7000 and a net of K900 per month. [But] groceries of K500 are not enough. Therefore people are surviving because they are selling something even "Nishanga" [cigarette sticks]. I would like to save so that I am not a vagabond. This is why everybody is starting businesses.

Respondents argued that those who followed the leadership code, regretted later. Songwe, a second year student, put it this way:

> I strongly feel that the leadership code should be abandoned because it is not, in any way followed by our so called leaders despite their shouting about it. A few that are blindfolded and practice the leadership code, end up in a deep ditch while the staunch preachers prosper and continue calling themselves 'peasant farmers' after earning abnormal profits from their businesses.

Kainga, a Lusaka businessman rendered support to Songwe and bitterly condemned the code for turning former leaders into paupers when he narrated his brother's experiences as:

> [By disposing property] ... the person would later on suffer. This happened to my brother. He sold buses, his farm ...a law firm at give away prices, just to become a Governor. He was told "Deny yourself and follow me". He was making about K1,000 per day. But now he is suffering. He is a PPs (Provincial Political Secretary), earning peanuts per month.
>
> [Keeping assets is good because] whatever happens to him later, he can get back into his comfortable position. ... He has been toiling all alone. How can somebody tell him how to distribute his property? No, it is out!

These views, concour with the researchers arguments presented in chapter 3 regarding top-down style of leadership code which was contradictory to traditional humanism as practised in villages even up to present day. One Lusaka businessman was unequivocal when he observed:

> [Restriction of business ownership by leaders is] unnatural. [This is] unlike a social system that we have in a village. [There], it is natural for everyone to make himself better.

8.2.5.8 BENEFITS AND DISADVANTAGES OF ABOLISHING CODE

All respondents were finally asked to indicate their level of agreement and disagreement on whether the code should be abandoned or effectively enforced. Preliminary analysis revealed that they were divided on these two issues since 42% (264 out of 630) wanted it to be abandoned while 37% did not. About 21% were not sure. This view was similar among students, graduates and businessmen as there were no statistical differences (see table 8A.12). But more respondents accounting for 46% favoured abandoning the code than enforcing it (37%). Thus 17% were not sure. The significance difference of 0.0625 among the three groups failed to pass the test. The implication of these conflicting results was that the notion of leadership code was acceptable in principle but the present code was rejected.

This view was confirmed by both statistical and content overall view analysis of the code. Chi-square analysis was done to compare their attitude to two separate main items at the same time:

(i) no business ownership and abandoning the code
(ii) no business ownership and enforcing the code

The findings were that more respondents favoured both abandoning the code and allowing leaders to own business, the proportions were 85% in favour and 50% against. This was statistically different at 0.0000 as table 9.7 clearly shows. Likewise the majority of 85% of all respondents disagreed to both statements calling for prohibiting business ownership and effectively enforcing the code while 58% agreed as table 9.8 vividly reveals.

It will also be recalled that content analysis above showed

that on the whole, respondents had very strong negative attitude towards the code. It can therefore be concluded that respondents wanted the present code scrapped altogether. There was however a small proportion who didn't favour complete abandonment, but preferred modification.

Table 9.7 LEADER SHOULD NOT CARRY ON ANY BUSINESS BY CODE SHOULD BE ABANDONED

No Business Ownership	Abandon Code			
	Agree	Not sure	Disagree	
	No.	No.	No.	Total
	Row %	Row %	Row %	No.
	Col. %	Col. %	Col. %	Row. %
Disagree	224	66	103	393
	57.0	16.8	26.2	62.4
	84.8	50.4	43.8	
Not Sure	4	31	14	49
	8.2	63.3	28.6	7.8
	1.5	23.7	6.0	
Agree	36	34	118	188
	19.1	18.1	62.8	29.8
	13.6	26.0	50.2	
Column Total No.	264	131	235	630
Column Total %	41.9	20.8	37.3	100.0

χ^2 = 151; P = 0.0000; Cramer's V = 0.35; No. Missing = 25

Table 9.8 LEADER SHOULD NOT CARRY ON ANY BUSINESS BY CODE SHOULD BE EFFECTIVELY ENFORCED

No Business Ownership	Effectively enforce code			
	Agree	Not sure	Disagree	
	No.	No.	No.	Total
	Row %	Row %	Row %	No.
	Col. %	Col. %	Col. %	Row. %
Disagree	246	61	86	393
	62.6	15.5	21.9	62.4
	84.8	36.9	37.1	
Not Sure	7	25	17	49
	14.3	51.0	34.7	7.8
	2.4	15.1	7.3	
Agree	37	22	129	188
	19.7	11.7	68.6	29.8
	12.8	13.4	55.6	
Column Total No.	290	108	232	630
Column Total %	46.0	17.1	36.8	100.0

χ^2 = 173; P = 0.0000; Cramer's V = 0.37; No. Missing = 25

Among code supporters, one major consequence of abolishing code foreseen by 10 out of 18 students and 9 out of 18 graduates who provided comments was exploitation of the was exploitation of the ordinary people by leaders. Others mentioned by a couple of persons were inefficiency due to conflicting fiduciary interests, misusing of property and finance. They recommended establishing of an enforcement agency and no owning of business while in

office. Only a couple of persons mentioned some benefits of the code. One of these was reducing the gap between the rich and the poor. It is not necessary to refer to quotations since these have been done at various points in the discussion.

About 88% (222 out of 252) who made recommendations in their extra comments suggested that the code should be abandoned. The first benefit of abolishing the code foreseen by 42% (47 out of 112) who provided extra comments was that it would lead to economic development. Another one mentioned as the first benefit by 21% (25%, 26% and 10% of students, graduates and businessmen respectively) was that it would lead to more business germination. Further it would encourage honesty among leaders instead of the present situation where they disguise themselves through relatives (20%).

The second main advantage of abolishing it proffered by 51% (33 out of 65) who commented on second benefits was that it would lead to more employment creation (71% of students, 47% of graduates and 29% of businessmen).

One disadvantage that was however recognised by small proportions of the students and graduates in abolishing the code was that it would result in unfair advantage by leaders.

The reasons provided for recommending to abolish it were very similar to those already provided at various junctures in the discussion above. For example, Chubili, a second year student recommended:

> The leadership code in Zambia should be abolished or done away with because it is just on paper.... It is difficult to suppress human feelings. If [a] man can use his brain to develop, [why not] let him go ahead as long as he can perform his duties in his capacity. Leadership code hinders a person's development. If I can do the job very well, then what I do in my spare time, is nobody's concern.

Johnson, a third year student was very sinister about the effects of enforcing leadership code. He concluded:

> My conviction is that if the leadership code [was] successfully enforced, it would be very effective in misallocating resources - a situation that is most detrimental to our development.
>
> I would [therefore] suggest that the leadership code... be discouraged since the grounds on which it is based are more political than economical. In fact, leaders should be barred from investing abroad. If they lead in good faith [they] should not be afraid of being convicted should they be thrown out of power!

9.2.6 SUMMARY OF FINDINGS ON LEADERSHIP CODE

The findings revealed that although students appeared to be marxists while at the University, they did not inherently have negative attitudes towards business ownership by themselves or by leaders. The general finding was that there was no support for leadership code, as per present definition. More respondents did not want the code to be strictly enforced. But fewer did not want it to be abandoned, completely. The overall finding on code was that since the views of code supporter and the objectives of the code were more political than economical, it would appear that the most prudent action in the current economic problems, would be to abandon the code in its present form. The findings can be summarized as:

a) The definition of a leader based on salary was rejected

b) The present cut off point of an annual salary of K2,500(-250) for qualification to leadership is too low. An average of K20,000 was suggested, if leadership would continue. But 75% of all students, graduates and businessmen felt that about K30,000 should be the cut off point to qualify for leadership.

c) Leaders should be allowed to own businesses.

d) Leaders should be free to sublet their property.

e) It is proper for a leader to dispose property to any person including members of his family upon assumption of office.

f) Leaders should be free to decide what to do with their assets when they assume office.

g) Leaders should be free to have more than K2000 in cash or

bank deposits. There should be no limits, this is needed for economic investment, business start ups and security after retirement.

h) More than half of the students, graduates and businessmen agreed that leadership code discourages business start ups. Some however felt that it was still possible for a leader to form a business as the code has not been effective, although the potential threat and fear was there particularly to a some sincere leaders.

i) There was unanimity of about 9 out of 10 persons that the code was flouted by leaders.

The main supplementary findings from their comments on the effects of the code therefore were first that it resulted in discouraging people who had the means or access or management capability from starting businesses. Second, it encouraged leaders to start businesses in foreign countries at the expense of developing Zambia. Third, it also encouraged unemployment. Fifth that leaders should therefore be allowed to own businesses if they were capable of combining the burden of leadership and owning. But that they should not be involved in the management of their companies while in office.

Policy makers were therefore asked to compare the costs and benefits of the code. In doing this they were advised to critically evaluate its objectives and effectiveness. They were strongly advised to put more emphasis on economic purposes and results since the country desperately needed leaders' capital for effective investment.

9.3 AWARENESS AND KNOWLEDGE OF SMALL BUSINESS SUPPORTING AGENCIES

Respondents were asked three basic questions about the two prominent organisations in order to measure awareness and knowledge of organisations available for getting assistance when forming a business by all potential businessmen (including students and graduates) and practising businessmen when faced with a difficulty. To test the depth of knowledge, the first question asked about their awareness of the two most important organisations, the second on whether they knew them and the third requested for three important activities of the two organisations. Findings showed that most respondents knew SIDO better than SEP. Businessmen were the most knowledgeable. But graduates were more knowledgeable than students.

Members of each of the three groups were asked whether they had heard of SEP. Combined results for the three groups revealed that in 43% of the cases (283 out of 816), respondents said "yes". This was: 28% students, 51% graduates and 47% businessmen. These differences that more graduates and businessmen had heard of SEP than students were statistically significant at 0.0000. Asked the same question, in the case of SIDO, almost all respondents had heard of SIDO (95%). The distribution was 98% for students, 96% for graduates and 90% for businessmen. This was statistically significant at 0.0000. These results meant that almost all students and graduates had heard of SIDO while 9 out of 10 businessmen had done so.

Comparing SIDO with SEP in table 9.9 revealed that while 58% who had heard of SIDO had not heard of SEP, only 23% who had

heard of SEP had not heard of SIDO. In other words 41% of all respondents had heard of both organisations while 77% had not. The interpretation was that more respondents had not heard about the two organisations. But more had heard about SIDO than SEP. These differences were statistically significant at 0.03.

To test whether their responses were genuine, and their depth of knowledge of SEP and SIDO, the second question asked those who had claimed to have heard of the two organisations, whether they knew each of these organisations. A proportion of 58% (148 out of 259) replied they knew SEP. The separate distribution was 47%, 60% and 57% for students, graduates and businessmen respectively. No group knew SEP better than the other two since differences were not statistically significant. The overall percentage distribution in the case of knowing SIDO was 78% (484 out of 594) for "yes". This was 85%, 80% and 69% for students, graduates and businessmen respectively. These results were statistically significant at 0.0006 (table 9.11). This implied that SIDO was well known. In particular students and graduates knew SIDO better than businessmen. Comparing SEP to SIDO indicated, as would now be expected, that while a larger proportion of 34% who knew SIDO did not know SEP, a smaller proportion of 17% who knew SEP did not know SIDO (see table 9.10). These differences were significant at 0.0000. When all respondents were considered (including those who had not heard of the two organisations, results showed that only 23% knew SEP while the proportion was 72% in the case of SIDO. The findings clearly showed that SIDO was better known than SEP.

Table 9.9 WHETHER RESPONDENT HAS HEARD OF SEP BY WHETHER RESPONDENT HAS HEARD OF SIDO

Respondent has heard of SEP	Respondent has heard of SIDO: No	Yes	Total
	No. Row % Col. %	No. Row % Col. %	No. Row %
No	24 6.8 77.4	329 93.2 36.4	353 57.5
Yes	7 2.7 22.6	254 97.3 43.6	261 42.5
Column Total No.	31	583	614
Column Total %	5.0	95.0	100.0

X^2 = 4, P = 0.0343, Phi = 0.09, No. Missing = 39

Table 9.10 WHETHER RESPONDET KNOWS SEP BY WHETHER RESPONDENT KNOWS SIDO

Respondent knows SEP	Respondent knows SIDO: No	Yes	Total
	No. Row % Col. %	No. Row % Col. %	No. Row %
No	40 36.7 83.3	69 63.3 34.0	109 43.4
Yes	8 5.6 16.7	134 94.4 66.0	142 56.6
Column Total No.	48	203	251
Column Total %	19.1	80.9	100.0

X^2 = 36, P = 0.0000, Phi = 0.37, No. Missing = 402

Table 9.11 WHETHER RESPONDENT KNOWS SIDO BY ZAMBIAN RESPONDING GROUP'S CATEGORY

Respondent knows SIDO	Type of Zambian Respondent: Student	Graduate	Businessman	Total
	No. Row % Col. %	No. Row % Col. %	No. Row % Col.%	No. Row. %
No	26 20.0 14.9	48 36.9 19.9	56 43.1 31.3	130 21.9
Yes	148 31.9 85.1	193 41.8 80.1	123 26.5 68.7	464 78.1
Column Total No.	174	241	179	594
Column Total %	29.3	40.6	30.1	100.0

X^2 = 15; P = 0.0006; Cramer's V = 0.16; No. Missing = 59

The third question further tested, those who had given a positive response to the question on whether they knew SEP, their depth of understanding of SEP's functions. They were asked to state three most important activities of SEP. Evaluation of the activities mentioned showed that in general, even those who claimed to know its functions did not do so very well.

A proportion of 36% (52 out of 146) were rated good, 46% (67) were average and 19% (27) poor. (Good meant they mentioned at least 3 activities correctly, average for at least 2 and poor for 1). Thus a very small proportion of 19% (119 out of 616) of all respondents asked about awareness of small firm supporting agencies were rated average or good (mentioned at least 2 activities). The distribution for the three groups in the good category was: 55% (11 out of 20), 29% (21 out of 72) and 37% (20 out of 54) for students, graduates and businessmen respectively. The average category's distribution was: 20%, 47% and 54% for students, graduates and businessmen respectively. For poor classification the proportions were 25%, 24% and 9%. This meant that for few remaining respondents, businessmen knew SEP's activities better than students or graduates. Among the first most important activities mentioned, the total proportions and individual distributions for students, graduates and businessmen respectively were: a) promotion of small businesses - 49% (40%, 51% and 48%);

b) providing finance - 36% (40%, 35% and 35%);

c) providing technical aid - 12% (13%, 10% and 14%);

d) other - 4%

Evaluation of their understanding of SIDO's functions showed that the proportions were 35% (163 out of 464) for good, 48% average and 17% poor. The proportion of 82% of respondents (387 out of 829) who scored good or average out of the initial total who were asked about their awareness of SIDO were by far greater than SEP's proportion of 19% as seen above. The individual group's distribution for those who scored good on SIDO were: 39%, 30% and 36% for students, graduates and businessmen respectively. For the average category this was 41%, 52% and 50% in the same order. It was 20%, 18% and 11% for poor or no idea. The groups were equal as differences were not significant. Among the first most important activities indicated, the total proportions and individual distributions for students, graduates and businessmen were:

a) promotion of small businesses - 50% (51%, 47% and 55%);
b) providing finance - 24% (27%, 21% and 27%);
c) providing technical aid - 13% (8%, 19% and 9%)
d) other - 13%

Chi- square analysis of comparing evaluation of SEP and SIDO confirmed that the functions of the two organisations were not well known. For example 70%, 67% and 82% scored poor or no idea, average and good in knowing the functions of both organisations taken together. But SIDO's functions were better known than SEP's. Reference to those who scored poor or no idea on SIDO showed that if a person did not know SIDO'S functions, he was unlikely to know SEP'S functions (see table 9A.13).

The findings on awareness and knowledge of small firm supporting agencies meant that respondents were aware of these organisations. But they did not clearly know their functions.

But SIDO was better known than SEP. One of the implications could be that potential and practising businessmen were aware that SIDO could provide some kind of assistance in business start up. Another implication was that the findings in chapter 7 that many organisations did not receive financial assistance from SIDO or SEP did not mean that they did not know of their existence. But this was due to some other reasons such as fear of high interest rate as seen or inability for these organisations to assist them as will be seen in the next chapter.

Summary of Findings on SEP and SIDO

Results indicated that in general respondents from the three groups were aware of the presence of the two small business supporting organisations. specifically, the greatest majority of students, graduates and businessmen were more aware of SIDO (95%) than SEP (43%). But graduates and businessmen were more aware of SEP that students. But close to 3 out of 5 respondents knew SEP while nearly 8 out of 10 knew SIDO.

As regards knowing and understanding the activities of the two organisations a very small proportion of 19% of all respondents with valid data understood the activities of SEP. But about 3 out of 5 persons had at least an average understanding of SIDO's activities. More businessmen however understood the functions of the two organisations than the graduates or students.

9.4 SUPPORT FOR GOVERNMENT ASSISTANCE TO BUSINESS FIRMS

9.4.1 Results of Attitudes Towards Government's Policy of Assisting Small Firms

Students, graduates and businessmen rejected the notion of "no government assistance" to any firm. They would like all firms to be assisted, but particularly small business firms. These had little or no other sources of finance. They did not support the view that only established firms with proven records and experience should be assisted. The main reason being that such a policy limited industrial development.

All respondents were asked a series of open ended questions regarding their views and reasons on a government policy of assistance to business firms. Responses were then post coded in the most appropriate categories. The first question asked the three groups what their views were on a government policy of "no assistance at all" to any firm. The greatest majority of 94% (55% out of 595) of the respondents thought that such a policy would be unwise and counter productive (see table 9.12). There were no differences among the three groups. The reasons to an open ended question were basically three:

1) reduces economic development - 50% (294 out of 583) students, 49% graduates and 62% businessmen)
2) few new indigenous business start ups would result - 15% (24% students, 13% graduates and 9% businessmen).
3) bank finance, particularly to small businesses was expensive 13% (11% students, 21% graduates 6% businessmen).

The fourth main reason mentioned by 11% of businessmen was that many businesses could not survive without government assistance. The emphasis of various aspects was statistically significant at 0.0000.

When asked whether all business, small, large, established and new should be assisted, 53% (30% out of 573) of respondents argued it was essential: 44% of students, 37% of graduates and 70% of businessmen. However, about 21% thought that more assistance should be given to small firms: 21% students, 22% graduates and 20% businessmen. About 9% advised that viable businesses should be selected for assistance. These responses were statistically different at 0.0000. One of the two basic reasons advanced by 30% (182 out of 599) respondents for wishing to assist all was the need for establishing of an industrial base: 37% of students, 17% of graduates and 40% of businessmen. The second reason offered by 32% of the respondents was that only government was able to (25%, 33% and 36% of students, graduates and businessmen respectively). Those who wanted selective assistance to viable businesses only argued (23%) that assisting all encouraged inefficiency (23% students, 26% graduates and 17% businessmen).

The third question specifically asked the three groups for their views if government adopted a policy of assisting small firms only. In 60% of the cases (357 out of 595), respondents felt it was a good policy (60% students, 69% graduates and 50% businessmen). However 37% (36% students, 29% graduates and 48% businessmen) argued that such a policy would be unfair as both small and large needed assistance. Differences were significant at 0.0015 (see table 9.13)

The basic reason advanced by supporters of small business assistance policy accounting for 41% (237 out of 575) was that private finance was difficult to obtain (31% students, 45% graduates and 46% businessmen). The two main reasons were advanced by those who wanted a policy of assistance to both:

1) both have constraints - 20% (23% students, 13% graduates and 24% businessmen);
2) small businesses ought to be assisted only up to maturity - 10% (16% students, 15% graduates). However, the second reason advanced by businessmen who wanted a policy of assisting both was that both contributed to economic development (13%).

Views were expressed that government policies existing at the time concentrated more on helping large firms than small firms. Kaombe, a Lusaka businessman said:

> As a matter of fact the government is assisting large firms than small firms...
>
> [At present] 15% of the national economy (private sector) ... is making this country tick. Parastatals... are doing nothing. [They] do not care about how much they spend. Their [parastatals] leaders go out of the country.... You find long queues at the Bank of Zambia where they get travel allowances in foreign exchange [footed by their companies at] $190 per day and spend it any away. Had it been a private businessman, he was going to think more than twice and save for his business....

Respondents felt that small businesses should be given special attention. Kanyanta, a Kitwe businessman, narrated experiences of industrialised countries, such as his country Germany, which:

> ... have grown to where they are through small industries. They started a long time ago as small businesses, but now they have grown into large ones.

Table 9.12 RESPONDENT'S MAIN VIEWS ON NO ASSISTANCE AT ALL TO ANY FIRM BY ZAMBIAN RESPONDENT GROUP'SCATEGORY

Views on no Assistance at all	Type of Zambian Respondent			
	Student	Graduate	Businessman	
	No.	No.	No.	Total
	Row %	Row %	Row %	No.
	Col. %	Col. %	Col.%	Row. %
This would be Counter Productive	167	250	182	599
	27.9	37.6	32.6	93.9
	97.1	94.2	91.0	
Yes, This Would be a Good Policy	4	12	15	31
	12.9	38.7	48.4	5.2
	2.3	5.4	7.5	
Other views	1	1	3	5
	20.0	20.0	60.0	.8
	.6	.4	1.5	
Column Total No.	172	223	200	595
Column Total %	28.9	37.5	33.6	100.0

χ^2 = 7; P = 0.15; Cramer's V = 0.08; No. Missing = 38

Table 9.13 RESPONDENT'S MAIN VIEWS ON ASSISTING SMALL BUSINESSES ONLY BY ZAMBIAN RESPONDENT GROUP'SCATEGORY

Views on assist Small businesses only	Type of Zambian Respondent			
	Student	Graduate	Businessman	
	No.	No.	No.	Total
	Row %	Row %	Row %	No.
	Col. %	Col. %	Col.%	Row. %
This Would be Unfair on Both Hand assistance	62	64	96	222
	27.9	28.8	43.2	37.3
	36.3	28.7	47.8	
Yes, This Would be a Good Policy	105	154	100	357
	28.9	43.1	28.0	60.0
	60.2	69.1	49.8	
Other Views	6	5	5	16
	37.5	31.3	31.3	2.7
	3.5	2.2	2.5	
Column Total No.	171	223	201	595
Column Total %	28.7	37.5	33.8	100.0

χ^2 = 18; P = 0.0015; Cramer's V = 0.12; No. Missing = 38

Table 8.14 ZAMBIAN RESPONDENTS' VIEWS ON ASSISTING SMALL BUSINESSES ONLY BY VIEWS ON ASSISTING ESTABLISHED FIRMS ONLY

Views on assisting Small Firms only	Views on Assisting Established Firms only			
	Student	Graduate	Businessmen	
	Unjust Policy No. Row % Col. %	Good Policy No. Row % Col. %	Other Observations No. Row % Col.%	Total No. Row. %
Unfair as Both Need assistance	191 86.0 39.8	29 13.1 28.4	2 .9 20.0	222 37.5
Yes, Good Policy	275 77.7 57.3	71 20.1 69.6	8 2.3 80.0	354 59.8
Other Views	14 87.5 2.9	2 12.5 2.0		16 2.7
Column Total No.	480	102	10	592
Column Total %	81.1	17.2	1.7	100.0

X^2 = 7; P = 0.1300; Cramer's V = 0.08; No. Missing = 61

When asked for their opinions on a government policy of assisting established firms only, the three responding groups were unanimous 81% (484 out of 598) in rejecting such a policy as being unjust (75% students, 79% graduates and 88% businessmen). Only 17% (21% students, 19% graduates and 12% businessmen) thought that was a good policy. The responses were however statistically different at 0.0066. Two main reasons were proffered by those who were against assisting established firms only:

1) such a policy stifled new firm generation - 50% (280 out of 561) (39% students, 46% of graduates and 63% of businessmen).

2) new firms needed more assistance than established ones - 13% (15% students, 17% graduates and 8% businessmen).

The basic argument those (14%) who advocated a policy of assisting established firms only was that such firms had proved their commitment to their firms. Government would not therefore be wasting resources (17% students, 15% graduates and 10% businessmen).

Crosstabulation of assisting small businesses only and assisting established firms only showed that on the whole 70% of respondents favoured assisting small firms and established firms. But 60% preferred to assist small businesses but not necessarily established firms (see table 9.14).

9.4.2 SUMMARY ON A GOVERNMENT POLICY OF ASSISTING FIRMS

To sum up, results showed that students, graduates and businessmen supported government policy of assistance to firms. They rejected a policy of "every one for himself and God for us all". Such a policy retarded economic development, they argued. It discouraged the mushrooming of indigenous firms. They preferred a policy that assisted all firms in order to establish a larger industrial base. Over three in five cases however, preferred a policy that assisted more small businesses. These faced more financial constraints as they could not easily obtain private or bank finance. A policy of assisting established firms which were serious and had proved commitment to manage their own firms was unanimously rejected as that constrained the mushrooming of new firms. These needed more assistance as private capital was difficult to obtain, they advised.

CHAPTER 10 STIMULATORY POLICIES (FISCAL): ROLE OF GOVERNMENT AND SMALL BUSINESS SUPPORTING ORGANISATIONS IN SMALL SCALE DEVELOPMENT AND FINANCING

10.1 INTRODUCTION

The fourth hypothesis was that small business stimulatory policies were inadequate to encourage potential small businessmen (including students and graduates) to form more businesses. One of the two objectives was to assess Government's non-fiscal and fiscal incentive policies. Chapter 9 dealt with the former. This chapter concentrates on the later.

Two fiscal incentives that were evaluated by asking eight open ended questions to small business supporting agencies were:

a) adequacy of Current levels of financing SIDO and small businesses through SIDO by the Government;
b) effectiveness of Bank of Zambia's guarantee scheme as a source of capital for small businesses.

These two were examined through personal interviews. Although 25 key organisations were initially selected, interviews could be secured with 16 organisations only. Those interviewed were Bank of Zambia's Credit Guarantee Departmental Manager, SIDO Director and Projects Manager, SEP's General Manager, Headquarters Managers of five of the 8 Commercial Banks in Zambia, Executive Secretaries or Financial Secretaries or Commercial Secretaries from 7 of the 9 District Councils along the Line of Rail, where research was conducted. Personal discussions with officials of some overseas donor agencies were also held. In addition, during the interviews with business owners, these issues were raised in

order to provide more rich qualitative data. This approach used expert opinion methodological technique. Content analysis was used to draw general conclusions.

Several aspects of government fiscal policies including SIDO Act, Investment Act, have already been dealt with in section III (Literature Survey, Chapter 4.2.3.4). Field investigations however examined four issues:

1) adequacy of direct financing of SIDO by the Government.
2) central Government present fiscal policies, their effectiveness and efficacy of the guarantee scheme;
3) availability of private finance to small firms and their views on the likely effectiveness of the guarantee scheme;
4) present local government stimulatory or fiscal policies.

Research findings showed that the problems of financing of small scale businesses, in Zambia, will continue for a long time to come despite good Government's pronouncements of small scale business support policy.

First, direct Government financing through SIDO was inadequate. Second, Government fiscal policies were virtually non existent or ineffective. A recent, Government initiative of a guarantee scheme through the central bank (Bank of Zambia - BOZ), would have no effect on easing the financial hardships of small business owners. Small Business Guarantee Scheme Department of the Bank of Zambia, vowed that present prudent lending standards and policies of commercial banks would not be tempered with. Commercial banks also indicated that since they were not

charitable organisations, but custodians of funds for other people, the scheme would have no effect as normal procedures and requirements would be followed in dealing with applicants. Third, private small business support agencies did not exist on a wide scale. SEP which started in 1983 could not cope with the demand. Fourth, bank finance policies and practices favoured the large rather than the small firms. Fifth, Local Government stimulatory fiscal and non-fiscal policies or incentives were virtually non existent.

10.2 ROLE OF GOVERNMENT AND [illegible] AGENCIES

10.2.1 Financing of SIDO by The Government

Bank of Zambia, Ministries of Finance and Commerce and SIDO were selected for interviewing in order to assess government financing. The Permanent Secretary at the Ministry of Finance was, however, not interviewed as the researcher was referred to 'competent' authorities at the Department of National Planning and Development, and Ministry of Commerce.

At the time of the interview, SIDO was still negotiating with the Government through the Ministry of Commerce to be given special revolving development fund and loans for financing small projects. But no concrete agreement had been reached as to how the money would be funded. Although SIDO was created without proper funding, the Ministry of Commerce appeared to have been convinced, after four years of fighting for the cause, that SIDO could not operate without its own funding. The view of banks and international donor agencies however, was that SIDO should concentrate on promotional activities while funding of small

firms was left to the traditional specialised financial institutions. The argument was that SIDO could not effectively and efficiently fulfil the apparent conflicting fiduciary roles of promoting and financing the same firms. This view was shared by officials at the Ministry of Commerce.

SIDO had however found itself in a relegated position of doing what SIDO's Director called 'donkey work' for other institutions who got the credit (including a private promotional company - SEP). As these in turn carried out their own project appraisals, SIDO's sponsored projects were said to be discriminated against and often turned down, by financing organisations, preferring businessmen who approached them directly. This in turn led to SIDO being looked down upon potential customers as it was viewed as an ineffective organisation. Liswaniso, a Lusaka small businessman who was manufacturing soap elucidated the effectiveness of SEP and referrals by narrating his case:

> I came to know SEP through SIDO who recommended me for finance since they could not assist me. One of the advantages with SEP is that they help as long as the project is viable. You can borrow money when you have got a market. They also help with MAS [Management and Accounting Services].

Katongo, a Lusaka businessman for example expressed strong sentiments against SIDO's inability to help financially which was the most critical issue for starting off:

> I have little faith in SIDO because they are not helpful... small businessmen want working capital and SIDO is toothless: they cannot [even] guarantee your loan procurements. I don't think seminars and workshops will help me in any way. I don't think SIDO has been very effective...

SIDO's reaction to businessmen's view that SEP was more effective, was that this was a natural feeling. It was pointed

out that structurally, SEP was in a

> better position to provide funds because [it had] access to funds. Businessmen will look at such a person or institution who solves their financial constraints as the more effective since funds is the crucial issue.

This view that SIDO should be providing financial assistance was shared by businessmen as seen in chapter 8. Kaleya, a Lusaka businessman, made his observations about SIDO as follows:

> SIDO is good [at] talking and by issuing very good publications. But all these end on paper i.e. nothing is done [afterwards]. In my opinion SIDO should also be giving financial assistance (loans) to businesses. This money can be raised by inviting other organisations to join as partners.

SIDO officials felt that if the Government provided enough initial capital funds other institutions, including donor agencies, would follow suit since they would realise that the Government was serious. SIDO claimed that they

> have capacity to evaluate projects and administer funds. We have professional people needed. We will not be sympathetic, but will only fund viable projects because we need to survive.

At a Conference on the Funding and Co-ordination of Small Scale Industries Development Programmes in Zambia, which took place between 28th of July and 1st August, 1986, which the researcher attended, SIDO decried that professional employees, including technical staff, were leaving. This was attributed to lack of job satisfaction and challenge since there was little activity going on due to poor funding. SIDO questioned the conference why it could not hire financial specialists, if it was adequately funded if SEP and other financial organisations had been able to do so!

During the interview for this study, SIDO was asked for its views on the need for one small business promotional organisation

- an issue raised at the conference. SIDO's view, was that although one organisation was preferable at such a time of economic development, SIDO did not discourage competitive or complementary organisations. What was disliked was the tendency of such private organisations to project themselves as public institutions and using international connections to prevent funds going to SIDO.

Although SIDO's Director did not see any problem in competing with SEP, a few businessmen who commented on the issue later in their supplementary submissions thought the two organisations, created through government policy, were doing the same functions. Haambole, a Lusaka businessman argued:

> Project appraisal is done by SIDO and forwarded to DBZ [who do] not automatically accept it. DBZ also does its own project appraisal. It becomes time consuming for the promoter.... The role of SIDO should be that of SEP. [SIDO should finance small firms while] DBZ should promote medium and large businesses.
>
> Although SEP is private, why should the policy of government create SIDO and SEP at the same time? The money spent on SEP should be used to prop up SIDO. SIDO will become irrelevant, a white elephant if no financial backing is done. Why not then put the two together if their interest is to help the economic take off of this country's small scale?

Some other businessmen who commented on this issue also viewed the relationship between SIDO and SEP as conflicting. However the view of a few businessmen such as, Hakalinda in Lusaka, was similar to SIDO's director. He observed:

> [The roles are] not competitive. SEP is more like a bank. SIDO is a government organisation to locate [potential businessmen]. they are spokesmen for SEP. They have done very well in convincing banks. SIDO has in fact influenced the starting up of SEP.
>
> [It is therefore] unfair to compare the two organisations. SEP [being] part of a bank can initiate action immediately. SIDO as I am concerned is a very strong organisation but is disadvantaged....SEP has certain advantages over SIDO...[such as] finance.

The plight of SIDO's lack of finance was recognised by SEP also. It was felt that due to the prevailing economic situation, the Government would have a very small role to play in financing of small businesses. This was "why SIDO is facing a lot of problems since the Government has no money". It was feared that the financing of small scale, country wide, would remain bleak, particularly in rural areas. But SEP said:

> We are making headway along the line of rail. We also have a few projects in the rural areas, but far apart.

In rural areas, the operation and supervision costs were found to be prohibitive due to "poor roads, high travelling costs, and long distances". These were said to be some of the major reasons why commercial institutions were avoiding small businesses.

10.2.1.1 ROLE OF THE MINISTRY OF COMMERCE

One of the eight questions addressed to small business supporting organisations, sought to find out the types of facilities or assistance presently offered to small manufacturing firms and the criteria used. This section discusses government's role. For a discussion of SIDO'S present facilities offered and criteria used, refer to section 10.2.2 (role of supporting agencies and District Councils). The Ministry of Commerce as a government representative, was asked what its role was and the types of facilities it was currently offering to small firms.

First, the view of the Ministry of Commerce, SIDO's parent, was that the Ministry should not be turned into a financial institution. It's basic function was co-ordinating with the Ministry of Finance in submitting SIDO's financial demands. Small business units would be established within the Ministries of Commerce and Finance to strengthen the positions.

Second, SIDO would not be given the responsibility of financing projects. But would only be given a small revolving fund for small projects "like a small hammer mill". It was the Ministry's view that SIDO was not capable of managing a financial function. Reference was also made to a similar observation by UNIDO.

Third, SIDO was basically seen as a promotional agency. Enabling SIDO to finance projects, it was feared, would divert it from the primary purpose of promoting businesses. Promotion was viewed as providing awareness of possibilities of going into small business and available facilities and financing institutions. Recall from chapter 4 that SIDO'S functions were more than promoting and were wide ranging.

Fourth, it was argued that if SIDO was allowed to finance small firms, if prudent, they were going to apply the same standards as other financial institutions. It was therefore questioned how SIDO would be different.

It was the belief of the ministry that all funds which became available ought to be channelled through commercial institutions. The intention was "not to make a wholesale, but gradual process to encourage formation of small firms", it was emphasised.

10.2.1.2 ROLE OF THE CENTRAL BANK OF ZAMBIA

10.2.1.2.1 Introduction

When asked for its role and the facilities it provided, the Bank of Zambia (BOZ), said that it did not provide any funds, but a guarantee scheme for small firms was in the offing. The Bank's Small Business Guarantee Department summed up the impeding perpetual plight for financing SIDO and small businesses, in general. It's view was stated most explicitly:

> "We are not an International Red Cross Society to give anybody. If an entrepreneur has got skills, is serious, etc., he will not be inhibited"

It was stressed that the Government was there to give an infrastructure, an incentive only. "The financing aspect ought to be left to "professionals i.e. the banks". Government could not put in initial money as it had no funds. The general manager said:

> "Businessmen go into business primarily to better themselves. So they should sweat".

10.2.1.2.2 Bank of Zambia's Guarantee Scheme For Small Business

Bank of Zambia's guarantee scheme, which was still under discussion at the time of the interview, was enacted in 1986 as discussed in chapter 4. It's purpose is to encourage financial institutions to lend money to small businesses by securing 70% of a loan. The maximum total value exclusive of administrative costs is limited to K100,000 (£10,000) per customer. The scheme requires banks to take the normal precautionary lending measures, before benefiting from the scheme (refer to chapter 4.7.2.2.2).

One of the eight questions addressed to officials of several small business support organisations, indicated above sought to

find out whether Bank of Zambia's Loan Guarantee Scheme was considered as an effective source of loan capital to small firms.

Findings showed that the scheme would virtually have little if any effect for several reasons:

1) banks would still be required to take all prudent lending procedures including the demand for security as if there was no guarantee scheme to benefit from the scheme;
2) only 70% of the total amount advanced would be secured. In this regard, banks indicated that the balance of 30% plus income (interest) of another 30% and extra administrative costs of say 10% to 15% totalling at least 70% would still be insecure;
3) the traditional banking practices of charging prime rate to high risk customers would still be a deterrent factor;.
4) Some banks' small organisational structures were suitable for serving large businesses only;
5) there was no Government mandate setting a small business lending portfolio as had been done for the agricultural sector.

There was unanimous agreement by 6 out of 7 councils that the status quo would not be altered. One District Executive Secretary (Head of a District Council) flatly said:

> "BOZ guarantee scheme will not change anything at all. There is a lot of talk about security. [Take] a common man who has nothing, there has to be security of some sort. [Hence] lending institutions are weighted towards large firms [who meet this requirement]. Even to us councils - we are required to form a company [before money can be lent. Loans can not be advanced directly to a council."

A District Commercial Director (Head of a Commercial Section) also stated:

> There won't be any guarantee [by BOZ] for a person with no

> money or security. We are talking about a person from Northern Technical College with skills only. It is unlikely that banks will advance him loans without security.

It was concluded by one official when he said:

> Unless there is a government agency to finance projects, nothing will happen

by relying on the financial institutions. The official who said there was a lot of talk about security, advised the Government to:

> take a strong will as [it has] done with the agricultural sector [where] K80 million had been secured to be given to rural peasant farmers. This has been a gamble also.

Answers to the many questions raised above by councils officials and confirmations to their doubts were given by institutions close to the guarantee scheme. SIDO did not anticipate any significant changes because:

> As long as commercial banks perceive risks in certain projects, they will continue being reluctant to provide funds. But again you can not have a guarantee scheme which eliminates all risks from commercial banks. I am not therefore very optimistic.

SIDO's Project Manager coined it in this way:

> Commercial banks attitudes ... traditional theme that they will rather give to large firms than the many small firms ... will not change.

SEP's view was similar. They did not think the credit guarantee scheme would be useful to them because lending organisations were still required to take the normal precautions. SEP added:

> But may be commercial banks will find it beneficial [not us]. For SEP, we are still going ahead without credit guarantee scheme. Our attitude has not been negative. We give where normally [some clients] wouldn't receive.

The Ministry of Commerce however thought that the scheme would be used as an effective source to some extent. "It is a step in the right direction".

The most concise answers were however given by the Bank of Zambia and commercial banks. When emphasising on the need to take all prudent lending procedures, BOZ said:

> This has been insisted upon in all our meetings. We are not an International Red Cross Society ... [or] a charitable organisation. Banks are handling other people's money. The entrepreneur must be serious. So the need for insisting on security as a last resort.

The view by all commercial banks was that they would continue:

> to be very selective of customers putting into account things like viability, ability and geographical locations

as some banks do not have branches in rural areas. Expenses would be higher in such areas, wiping out the commission. Another official stated:

> We will insist that most of the laid down conditions are complied with by the borrower since we are going to lose 30%. [Even] BOZ say that the lending guidelines should not be diluted.

Still another bank Manager said

> The risk has not been changed drastically. There is nothing that will change prudence. You exercise prudence because risk is there. Second even if somebody has underwritten, to lose prudence is to lose 100% of money. You are not helping the businessman. But you are putting him in more problems.

Still more, another bank official succinctly remarked:

> Although it is a good move, I doubt whether commercial banks who are in business for profit will turn out to be charitable organisations. They have their own interests. We do not lend on the basis of guarantee but viability of the business.

The last manager emphasised the position of bankers when he concluded:

> We would evaluated the guarantee scheme. We are not in business to acquire security to sell off. We would be very happy with the government guarantee if the other normal precautions will be met. If I am not satisfied 100% that he can succeed, I am not going to lend [him]. My interest is not to get money from the government, [but] to see [him] succeed. Farmers, for example, had draught for three years, we did not run away from them.

Another problem mentioned by some banks like Citibank was that their type of structures were oriented towards supporting large businesses. Citibank, for example, serves customers with a minimum of K350,000 in a current account. This cuts off a lot of firms as they are primarily concerned with corporate financing, for example of at least K1/2 million credit. The reason for this is real costs since one branch, with a small staff, is maintained in Zambia.

> If you have to finance somebody, you have to justify the need for such a customer,

One bank manager, however advised that the Government should not claim that it does not have the money. His view was that

> it takes a revolution. Government should underwrite financing. Government should borrow....Necessary legislation can be institutionalised. The Government should underwrite the cost of development.

Results therefore revealed that Government's fiscal policy of enabling small firms get finance through BOZ guarantee scheme would have no marked changes.

The next section analyses other possible sources of finance for small firms. It also looks at the roles private small business promotional agencies are playing. It then investigates other facilities that are provided by government agencies (SIDO, and DBZ), private agencies, banks and District Councils in small business promotion.

10.2.2 ROLE OF GOVERNMENT AGENCIES

The main government small business promotional organisation is SIDO. The second one is Development Bank of Zambia (DBZ). Findings in chapter 7.2.3.3 on the raising of initial capital by practising businessmen, chapter 7.2.4 on raising of operational capital, chapter 10.2.1 on financing of of SIDO by the Government and on this section on the role of Government agencies showed that SIDO had virtually done little in small business promotion due to financial constraints. Documents obtained during fieldwork showed that DBZ has assisted a total of about fifty three businesses with loans valued at about K8,550,300 from 1983 to 1986. Some of these organisations were referred to DBZ by SEP and SIDO since this has turned out to be the main financing organisation.

10.2.2.1 ROLE OF SIDO IN SMALL BUSINESS PROMOTION AND FINANCING

10.2.2.1.1 Facilities offered

At the time of the study, SIDO said they were offering five types of facilities. These were feasibility studies, general consultancy, training, commodity loans and estates.

1. Feasibility studies

This included project appraisal, starting with pre-feasibility discussions with a prospective client to determine the viability of a project. The ideas were then sold to financial institutions for funding. These included DBZ and commercial banks. But according to SIDO the response to funding had been poor as "very few of our projects are funded ... hardly 10%. The rest do not get funds and are still waiting" .

Criteria for providing Assistance in Feasibility Studies

SIDO used the following criteria in providing the facilities:

a) promoter should have background knowledge or partner with an experienced person;

b) economic, financial and technical viability of the project. It should also be socially acceptable;

c) venture must be manufacturing or processing or service (in the areas of printing and repair workshops). Transport, agricultural, fishing, mining, tourism or retail establishments do not qualify;

d) the local material content of the product should not be less than 70%;

e) un-exploited areas are preferable. Areas such as tailoring in Lusaka are too prevalent and hence are not eligible.

2) General Consultancy

Technical and general management consultancy was also offered to any person in business on any aspect such as marketing or quality control. Some, with problems, went forward. Others were contacted by SIDO. Extension technical services included machinery and products provided by food technologists. Management consultancy included book keeping.

3) Training

SIDO ran periodic courses. They for example offered tannery courses in conjunction with Livingstone District Council in 1984.

4) Commodity Loans

SIDO also provided modest commodity and material loans through small budget reallocation due to lack of funds.

5) Estates

In Kitwe, SIDO had converted an old structure into sheds for small businessmen.

10.2.2.2. ROLE OF THE DEVELOPMENT BANK OF ZAMBIA

DBZ is a parastatal financial institution which commenced its operations in 1974. Its basic objective was to promote and develop medium and large scale industries to the virtual exclusion of the small scale industries (SSI). This was so because its statutory clauses, demanded minimum loan amount of 25,000.

Lending to SSI's started in 1983 after the amendment of the Act. By 1986, a total of 53 projects for the cumulative total value of K8,550,300 including initial working capital has been approved.

10.2.2.2.1 Facilities

DBZ offered financial services to clients who approached them directly or through SIDO and SEP. If through the later two, DBZ relied heavily on their project planning and appraisal. DBZ administered three revolving funds:

1) Small Industries Fund, SIF - a separate revolving fund set specifically for the SSI assistance programme.

2) International Fund for Agricultural Development, _ IFAD. This was donated to the Government of Zambia, on whose behalf it was administered, for agro-processing projects, workshops and rural transport projects in selected areas of North Western Province.

3) SFRD - established in 1977 with donations from the Norwegian Agency for International Development (NORAD) and the Canadian International Development Agency (CIDA). Although not initially meant for SSIs but for rural projects, SSI's projects qualified on condition that they were located in rural areas.

10.2.2.2.2. Criteria for qualifying

Any promoter from any part of the country and any sector, except agriculture (farming) was eligible. Certain service projects such as haulage transport and workshops were also eligible. Working capital applications were not entertained but referred to SEP. In practice, therefore, small manufacturing firms might benefit from SIF and SFRD funds only. In addition, for most who were located in urban areas, they were eligible for SIF only. As regards future facilities, DBZ intended to continue on similar lines.

10.3 ROLE OF PRIVATE SMALL BUSINESS SUPPORTING AGENCIES

SEP was the notable private SSI supporting agency. The company was established in November 1982 on the initiative of the Friedrich-Ebert-Stifting (FES). It commenced its operations in January, 1983. FES is a private socio-economic Foundation

registered in the Federal Republic of Germany. Initially it held 75% equity share, and DBZ held the remaining 25%. At the time, of the study, SEP was a Zambian owned financial institution (with 51% majority) with a total share capital of K1,700,000 (having been registered in January, 1986 under the Banking Act). The shareholders were: DBZ (15%), Zambia Congress of Trade Unions - ZCTU (15%), Zambia National Commercial Bank - ZNCB (10%), Village Industry Service - VIS (1%) for a total of 51% Zambian owned while foreign ownership were FES (24.5%) and Netherlands Development Finance Company - FMO (24.5%).

SEP's major objective had been to foster and encourage the development of SSI's by assisting Zambian small-scale entrepreneurs set up, expand or improve their businesses through provision of both financial and non-financial services.

10.3.1. FACILITIES OFFERED

SEP provided integrated financial and non-financial services for the establishment, expansion or improvement of viable businesses.

1) Financial

In 1984, SEP provided equity participation only besides non-financial services. A change of policy from equity to financing, in January 1986, in order to generate more funds and respond to the needs of the potential customer enabled SEP to provide seven financial services:

a) Micro working capital loans, ranging from K100 to K1,000 repayable within six Months;

b) Short term loans, ranging between K1,000 and K10,000 per single project, repayable over a period of 18 Months;

c) Medium term loans, ranging between K10,000 to K50,000 at 2% interest repayable in 3 years;

d) Long term loans ranging from K50,000 to K1 million repayable over a period of 12 years at 18% interest;

e) Lease - hire and hire - purchase facilities;

f) Guarantees;

g) Equity - participation not less than 10% and not more than 49% by SEP where a project was viable, the promoter's technical and managerial abilities were proven but was unable to raise the required 10% contribution to the project before a loan could be granted.

It was revealed during the interview and from annual reports that during 1985, a total of 300 applications for assistance had been received. A total of 22 projects were approved. Of these, 4 were for equity investment of K60,000, 4 long - term loans amounting to K408,585 and 14 medium term loans totalling K86,340. The company also administered on behalf of a private donor 14 micro-project loans to informal sector entrepreneurs, deemed potential SEP clientele, for a total of K5,000. The recovery rate was 90% for this informal sector.

2) <u>Non Financial Services</u>

It was revealed during the interview that after two years of operation, it became evident to SEP that the Zambian entrepreneur required not only financial services but also a hoist of non-financial services. Three main categories were then decided to be provided:

a) management and Accounting Services (MAS);

b) raw material, plant and equipment procurement service;

c) provision of transport and warehousing through MINTA Transport and Warehouse Limited and;

d) real estate facilities through SEP Real Estate Limited (SEPREC).

These are now taken up in the ensuing discussion.

a) MAS - Management and Accounting Services

There were three major purposes in providing MAS. First, this facility was provided on the realisation that the small Zambian entrepreneur did not know rudimentary record keeping. It was felt therefore that there was a need first, to

> "assist entrepreneurs establish simple and understandable Accounting systems"

suitable for their organisation structures. Second entrepreneurs were helped to "prepare books on a Monthly basis up to a balance sheet". Third, they were advised on their problems and courses of action needed in accounting and all management related matters. Fourth, they were provided with on the job training in management and accounts. A second major service of MAS was the organisation of workshops and seminars to reinforce the on-the-job training. The third was the provision of marketing service and marketing intelligence when needed.

b) Raw Material, Plant and Equipment Procurement

In January, 1985, SEP formed a separate wholly owned subsidiary MINTA Transport and Warehousing Limited (MINTA) to assist businessmen in the purchasing of raw materials, plant and equipment and in the transportation of these to their business

premises. Seven important reasons guided them in their decision. First, SEP discovered that in addition to accounting skills deficiencies, small entrepreneurs lacked access to wholesalers' discounts and credits for purchasing equipment machinery or raw materials. Second, this was particularly serious for overseas purchases where foreign exchange for some limited amounts of raw materials, plant, machinery and equipment. Third, "most were not familiar with procedures for applying for import licences and opening letters of credit. "Fourth, it was also costly, in time and money, making frequent trips to buy raw materials in small quantities. Fifth, many businessmen lacked transport facilities for their purchases. Sixth, they also lacked warehousing facilities for their procurements. The seventh reason, beneficial to SEP, was that it was considered desirable not to "mix the activities of financing with commercial" ones. Hence the need to start up MINTA. The fees ranged between 15% and 20% of landed cost on machinery.

At the time of the study, MINTA was providing transport service to Lusaka and Copperbelt clients using a 1.5 ton vehicle. MINTA's turnover for example had been K260,000 with K4000 after tax profit in 1985.

A 200 square metre warehouse for storing SSE's raw materials and finished goods had been finished in 1985.

Some businessmen interviewed in a different questionnaire who were SEP's clients, expressed indignation over MINTA's fees, considered to be very high, for this service. A few of SEP's clients did not also like SEP's equity participation, as that killed their entrepreneurial motivation, as they ended up

working for SEP, they claimed. Haambole, a Lusaka businessman for example observed and complained:

> ... SEP wants to be the promoter, financial and controller. They kill the initiative...[and] drive of the small businessman. [This is] because he has to be reporting to SEP who are the bosses. Businessmen feel inferior. Some have actually left SEP and in other situations SEP has taken over the running of such firms.

But as seen above, SEP realised these sentiments from some businessmen and as a result "our emphasis would now be on financing", the General Manager told this researcher. But he stated that equity participation would be voluntary. Haakalinda a SEP client, interviewed in Lusaka appreciated SEP's equity participation in his firm as that enhanced the company's image.

A few other businessmen who were in partnership with SEP, appreciated SEP's role in project appraisal and securing company's registration, provision of estates and in the provision of management and accounting services. But they bemoaned about the monthly high of this service of K350. The complaint was that this swallowed the entire monthly profit, especially for very small firms. Further the requirement of getting this standing service on a monthly basis even when it was not required was unwelcome. a Lusaka businessman, Mdashe, grumbled:

> we were assisted initially in project appraisal where we didn't get involved and in business registration. Estates were also provided initially. SEP provide management and Accounting Service at a fee of K350 per month. [This is so] as long as they are shareholders....even if you don't need them.

Hakalinda, who appreciated partnership with SEP since it enhanced the company's image was neither contented with SEP's practice of offering MAS even if it wasn't needed. He argued:

> The lady working here [dealing with book keeping] is qualified. but still they charge about K300 for a visit a month. An employee could receive salary increase. In the long run, it is costly. It is too much for once a month.

SEP's practice of paying the supplier of raw materials to a small businessman, upon presentation of a confirmed order for the finished products of the small businessman was not liked, either. This was because SEP required that payment for the finished goods be made to SEP who would deduct amounts owed by the small businessman for the raw materials supplied before passing the balance, if any, to the small businessman. Small businessmen felt they were working for SEP only since very little money was left after paying for all the bills. But SEP argued that it ought not to happen if good planning and pricing was done.

One of SEP's complaints against the Government was lack of exemption from import duty on machinery. It was felt that certain "concessions to SIDO members" could be granted instead of expecting them to fight for their cases individually. SEP would also like to be exempted from paying income tax.

c) Real EState Facilities

Realising the need for working premises for entrepreneurs, SEP formed another 100% owned subsidiary, SEPREC, to provide serviced plots and shades. Most small businessmen lacked these since individual plots were too large and were very costly and hence out of reach to most small businessmen. In an interview with District Councils, responsible for allocating plots, it was discovered that industrial plots cost between K10,000 and K40.000, depending on the District and the type of area serviced. The cheapest plot in Lusaka was K20,000. This was certainly too expensive for most small businessmen.

SEP therefore purchased A 12,000 square meter plot in Lusaka, developed it and then subdivided it into small ones. It

has been serviced with electricity, water, roads, security wall fence. These were seen by the researcher when he visited the site. It can accommodate at least 40 small scale enterprises. A total of 12 enterprises were settled on the plot during 1985. The researcher was told that small businessmen were "free to own or buy certain shares in the plot" with legal sub-deeds. SEP added:

> "The plots were sold at cost plus 15%. Individuals were free to construct a type of building suited to their needs".

10.3.2 CRITERIA APPLIED BY SEP IN OFFERING SERVICES

The following criteria were used in considering applicants:

a) Only persons or groups of persons

> "who showed initiative by setting up a business or were in the process of setting up one"

A person for whom the business was not the main occupation, absentee owners were excluded;

b) the entrepreneur ought to be a SIDO member as required by the SIDO Act.

c) manufacturing, assembly and processing industries engineering, construction and repair workshops were eligible;

d) preference was given to projects which:

i) Contributed towards foreign exchange savings and/ or earnings:

ii) Used local raw materials

iii) Developed local technology and of manpower skill

iv) Zambian owned and managed

e) Viability of project

i) Financially

ii) Can be technically implemented.

10.3.3 [illegible]

SEP would like to provide their own technical consultant experts instead of relying on outside technical assistance for production, quality, selection and assessing suitability of SSE's machinery.

10.3.4 SUMMARY

Findings showed that although SEP was a young organisation, virtually unknown and on a lonely island, a great achievement had been made in this private sector. Due to its small size, it had not been able to satisfy the potential customers who were many. Almost all the projects had been concentrated in urban areas since these "are easily accessible and offer a reasonable chance of success", SEP admitted. During the study, it was found that out of 22 projects that were being serviced by SEP, all 11 where equity participation had been provided, and 10 out of 11 where long term loans had been given, were in urban areas.

10.4 ROLE OF FINANCIAL INSTITUTIONS

It has been shown above that the inquiry into the effectiveness of BOZ's loan guarantee scheme as an effective source of bank loan capital to small firms established that the 'status quo' would remain unchanged. Investigations into the types of facilities or assistance banks themselves offered directly to small manufacturing firms also uncovered that none of

the banks in Zambia, except the Development Bank of Zambia (DBZ) offered any specific assistance.

10.4.1 FACILITIES PROVIDED BY THE BANKING COMMUNITY

None of the 8 banks interviewed, out of the 9 banks existing in Zambia, offered any specific programme or concessionary facilities to small firms. The facilities offered to all businesses on equal basis were short, medium and long term working capital and overdraft facilities. No equity assistance was given by any. Two of the five banks practically excluded small firms by demanding a large minimum balance in a current account. Asked why they do not offer special facilities or concessions one bank manager, commenting on equity retorted that the percentage of networth was very little for small businessmen. He continued:

> "The high proportion is from borrowing. [He needs to] borrow capital for factory, machinery and working capital. We are therefore being asked to provide [the entire financing of a business through] these long term [obligations]. That is not our duty as commercial banks. The Government can come in to provide capital, through other institutions such as DBZ. That institution,

Another manager commented as follows on facilities:

> That is the way it is. The risk factor is higher. The administrative costs are higher ... our role is to give a loan ... no consultancy ... though we give advice [but] not specialised. One [businessman] has to know what one is doing.

10.4.2 CRITERIA USED BY COMMERCIAL BANKS

The criteria required by commercial banks virtually excluded prospective small business owners. These in most cases posses only their skills as argued by respondents in an earlier discussion on the section on BOZ guarantee.

Investigations revealed that about eight requirements were needed by most banks in Zambia. Not all banks used all the guidelines. These will now be taken up in the ensuing pages.

1. Viability of the project. The nature of the project from project evaluation. Two banks acknowledged co-ordinating or relying on SIDO's other than their normal appraisal. Knowledge of what a businessman wants to do, marketability of the project and products as well as the cost of the project were considered.

2. Capability to repay the loan. Banks viewed cash flow projection as a critical point. Leverage ratio of less than 3.00 preferably zero was expected (found by dividing paid up capital by debits). The argument being that if a person was already heavily indebted, giving him more loans increased the leverage ratio and the risk of failing to pay back. A current ratio of more than one was required (current assets divided by current liabilities). The lower the ratio the less probability that he would be able to pay back the loan. In both situations, giving him more loans was not helping him but burdening him, it was pointed out.

3. Character of the person. The prospective borrower should be of high integrity. That is one who commanded respect in business or social setting. A minister for example might be given a small loan "because of his office" one bank manager stated. (Recall the comments by the three main respondent groups on leadership code that leaders had most of the qualities banks look for in chapter 8).

4. Management capability. Related to the previous condition were management competence, experience and educational level. This included management succession if the owner died. Hence the preference for registered companies. Sole proprietors were treated as individual borrowers. (Recall the discussion in chapter 7.2.1 that 70% of firms were private limited companies, because of this requirement). Not also that the educational requirement further casts doubt on the chances of grade VII dropouts getting any financial assistance from financial institutions, particularly that they would most likely not have their own resources, common in small business start ups as seen in chapter 7.

5. Involvement in the management by the owner. Related to four was the need for the owner to be involved in running the business personally instead of hired labour, required by some banks.

6. Capital investment by owner. All banks revealed that they did not give equity but working capital. Hence the owner was expected to invest his capital first in the business to show his commitment. One bank official mentioned that at least a quarter of the needed amount should be from the owner. It was emphasized that he would work harder knowing that he stood to lose money also if the business collapsed instead of only lending institutions incurring losses. (Recall the findings in chapter 7.2.3.3 that initial capital was raised through own savings in 83% of the cases. Only 14% was through shareholders or parent companies).

7. Track record. The prospective borrower was required to have proven record over the previous 3 years of his operations. He was

also expected to have meaningful cash flows. (Hence this effectively excluded starters such as college and university graduates).

8. Security. All banks stressed that although the importance of security had been over-played, it was required only as last resort, a cushion to fall on for insurance of the business if everything else failed. They claimed that they were not interested in confiscating his assets, but wanted their money back as a priority. Reselling assets might not sometimes be easy or possible. The preferred floating charge were collateral tangible security, for example mortgage or life insurance policy with surrender value. Guarantees by another person, supported with a mortgage were also acceptable.

Asked to clarify whether perceiving collateral as the last resort was practical considering that it was always insisted upon in spite of being aware that most small start up businessmen had nothing, but their skills, one bank manager said:

> That is practical, based upon our evaluation of the client, we want to invoke collateral. Second ... our experience [of] 80 years ... shows that there is high rate of failure. This is why we want collateral. Just go along Kabwe road, you will notice a lot of retail businesses which have failed. The manufacturing business is even more complex

Expressing the peculiar financial hindrance Zambian potential entrepreneurs face Haambole, a Lusaka businessman interviewed in the other questionnaire observed and advised:

> Finance is the critical issue [for business start up]. Retirement benefits are very little. The only way is to go to institutions of lending. [But] conditions do not favour 90% of Zambians. They are too tough and demanding. How can a university graduate, a college graduate or a retired person raise money / capital required or the security that is required? We are still very poor.... Equity contribution required is too high even if he has worked for 30 years.
>
> Lending institutions must ask for only basic security:

1) Borrower is genuine-that he is a Zambian, will operate his...registered...limited business in Zambia. [It should be limited because] lending institutions lend mainly to limited companies.

2) Borrower has a trading and manufacturing licence and ready to start... Manufacturing licence would work as security since you are ready, serious and has incurred substantial amounts to secure it.

3) Premises to operate from ...[or] at least a backyard to operate from.

4) Percentage of equity contribution should be low instead of 10%. My project is now K1 million due to inflation

5) Viability of a project could include consideration of project preparation as security. Somebody has spent money on the project.

10.4.3 EFFECTS OF SECURITY, INTEREST RATES AND BANK CHARGES ON BUSINESS START UPS

One of the eight open ended questions addressed to the 18 institutions, investigated whether high levels of (a) security, (b) interest rates and (c) bank charges to small firms were regarded as an hindrance to high growth rate and development of these firms, which were viewed as the seed-bed of a nation's economic growth. The inquiry also sought their views on whether Zambian banks ought to relax high demands in order to encourage growth of small firms and healthy economy in the long term.

The view of SIDO, SKP and the seven Councils was that security was a practical hindrance. Interest was considered to be very high. It was argued that the ruling interest of 30% (increased from 25% at the time of fieldwork) meant that a potential businessman had to make a minimum profit margin of 30% just to pay off debits.

10.4.3.1 **HIGH LEVELS OF SECURITY**

The seven bank managers interviewed, at headquarters, out of a total of nine banks operating in Zambia, agreed that demands for security might discourage potential entrepreneurs forming businesses. They however felt that the need for security has been over-emphasised. Security was not seen as a necessity as they also asked for other criteria. But "... a measure of comforting me. Cash financing is the priority", one bank manager said. Another bank manager put it this way:

> Security is the last [requirement] we ask for. But this is because if you have no risk in it, you will be much more prepared to walk away from it if the going gets tough than if you have your life savings stack in it.

The non banking institutions also agreed that security could be a hindrance to business start ups. They were however in dissonant with bankers on the latter's claim that security was the last thing they considered.

SIDO regarded security as a practical hindrance, particularly the use of "Security of a house which was not universal". SIDO's view was that:

> Security should be the last thing. But banks find it the easiest way out because they lack comprehensive analysis. Project viability should be the main source. But banks do not make site visits to evaluate whether a project will pay back.

They advised banks to look at the entrepreneur himself.

Councils also challenged banks' assertions that security was regarded as the last thing. They argued that a lot of ventures were viable but were killed because of lack of security. One District Secretary argued that commercial banks in Zambia acted as if they were in

> countries [such as] U.K. and America [where security is easily available]. We shall never develop. Government directives ... [which are] abundantly clear to banks ... are needed

as has been the case in the agricultural sector, he advocated.

A Chililabombwe District Financial Secretary also refuted the claim that security was viewed as the last thing. He gave an example of a tavern business owner who applied for a loan for the

> Construction of an additional tank for Chibuku ... to expand his business, ... but he was refused because he did not have security [Chibuku is a favourite local opaque beer brewed and distributed by District Councils to their own or independently owned taverns or beer-halls].

The District Financial Secretary continued:

> The Council was approached by this businessman to prepare a feasibility study of cash flow projections.

Although this was done, the "bank suggested that the Council should stand in as guarantor". This was not however possible since the Administrative Act, under which councils operate does not permit this.

He gave another example of Zambezi District Council, where he had previously worked. An application by the Council for working capital overdraft to open a motel, which was already constructed, was turned down because of lack of security - fixed deposit. Buildings were rejected because these were public property.

An attempt to use "character of the Council" was refused. He claimed, "the bank official did not even visit the motel". He wondered how a small businessman would easily get bank finance if a Council faced such constraints.

A small businessman, who was in a full time employment with Zambia Airways, interviewed in the businessmen questionnaire in

Lusaka narrated how he the banks insisted on security that he had to:

> sell the two vehicles I had, used ... own savings and used my life policy to secure a loan with a bank, but all in vain.

Failure of banks or their lack of interest in visiting project sites before turning down an applicant was a general complaint by businessmen also, interviewed in a different questionnaire. One businessman claimed and asked:

> Once banks know that you have little or no security, they are not interested. How can they evaluate viability without visiting the site?

10.4.3.2. HIGH INTEREST RATES

There was general consensus among District Councils that the ruling rate of 30% was too high not only to small firms but also to large businesses and Councils. One District Commercial Secretary said:

> The rates are just too high, even to us as councils. We are failing - this is why we go to Local Authority Superannuation Fund and Zambia National Provident Fund which [are] 8%. [He argued although] BOZ has its own reasons for determining rates, the bad side effect is the constraint on economic development.

It was argued that high rates could constrain small firm start ups since it determined the cost of a project, the products and the total cost of capital to the entrepreneur. This in turn might determine the return on the investment since high prices for produce might lead to no demand for the the produce. Five of the seven councils urged banks to consider offering concessionary interest rates.

District Financial Secretaries from the two councils, not supporting concessionary rates, agreed that interest was too high. But they argued that reducing the rates was theoretically good, but practically difficult, since banks also borrowed at a fixed rate.

SIDO's view on the level of interest rates was in agreement with councils. They held that interest had become "too high for anybody". The problem was however said to be

> hypothetical not a practical hindrance [since] they do not qualify for loans. These can always be passed on to the consumer."

SKP and commercial banks also accepted that interest rates were too high. One bank manager admitted that it could discourage business formation because

> anybody who has to start a business beginning with 30% interest should have a high rate of return

to remain in business. But all the bank managers stated that rates reflected the operations and the cost of funds in the economy. That rate was dictated by the Central Bank's base rate to discourage borrowing in order to reduce the burden of money flow. It was argued that banks could not lend at rates lower than the cost of capital. One bank manager stressed this point by saying "to give at less than 30% is stupid".

Asked why concessionary minimum rates could not be applied instead of maximum rate, one bank manager argued:

> if the difference between prime rate and lower rate (i.e. 30% and 26%) is going to determine his [total] failure, then he is not suitable to go into business.

One manager from an international bank advocated for a balanced argument. He accepted that interest rate was

> high especially in an environment of high rate of inflation. What you are doing is helping large industry which is experienced and can be easily assessed on a large base. But ... due to competition, you have to offer competitive interests. You can charge base rate if there was no competition. BOZ has for example raised the bank rate to 30%. If we have to borrow, we have to lend above the cost of borrowing, i.e. above 30%. We are losing money if we lend at less than the inflationary rate which is now at 60%

10.4.3.2.1 Appropriate Levels of Interest for Small Firms

A different question sought respondents' views on what they thought interest rate on loans to small firms ought to be. All District Councils, with the exception of one, suggested that banks should offer concessionary interest rate, as has been the case with the agricultural sector. Banks ought to meet the difference between base rate and lending rate. Contrary to this view, all financial institutions (except one), Ministry of Commerce and SIDO stated that the rates ought to be the same for all customers.

District Councils argued that since the bulk of banks' clients were large firms, these ought to subsidise the reduced rates to small manufacturing firms. Five of the seven District Council officials suggested that "it should be the same rates as presently offered to peasant farmers Commercial". One suggested to "reduce to a low level of about 8%". One District commercial Manager argued :

> "it is just like other products of a firm. Some have low return and are subsidised by high income generating ones."

The institutions who were against concessionary rates put forward two arguments. The first was that the rate ought to be the same as it reflected the "scarcity ... or cost of money".

SEP, for example argued:

> The rate should be the same (though we are lower at 18%). We may also have to charge the commercial rate if we have to obtain the funds locally. Small firms should be able to compete. The minimum interest rate is the bank rate, i.e. the lending rate by Bank of Zambia to commercial banks.

The second reason was that interest rates were

> dictated by BOZ. [Hence] nothing can be done, [unless] government underwrites the costs,

stated one bank manager. Another bank manager emphasised this point when arguing against the need to relax demands on small firms when he said:

> demands should remain high if not more due to poor economic situation or else parent companies will pull out. It is as simple as that.

Two additional reasons were given by BOZ and SIDO. BOZ's Small Business Guarantee Department argued that they had no plans to change interest rate. They can not subsidise the small firm by reducing. Concessionary rates would be

> more costly, result in confusion and benefit the intermediary institutions as [was the case] in 1988. Interest [was] 8% to agriculture and 11% to commerce ... and 3% of their [banks] total loan portfolio was to be agricultural loans. But what materialised was that a farmer who bought a lorry for use in his farm was charged 11% because it wasn't a tractor. Yet commercial banks classified it as an agricultural loan when reporting to Central Bank [thereby benefiting by 3% and] counting this towards their agricultural loan portfolio.

SIDO did not believe "in a preferential treatment for small scale business" for interest rates because they enjoyed "compensatory effects of lower overheads".

One bank manager nevertheless offered to consider "linking it [interest rate] with base rate". Another said:

> [he] would be prepared to ... apply ... concessionary rates to emerging small manufacturing businessmen [as] we have demonstrated to LIMA programme [This is a programme dealing with emerging farmers those with not more than 35 acres].

10.4.3.3 NEED FOR A MORE AGGRESSIVE APPROACH TO FINANCING SMALL AND NEW BUSINESSES BY BANKS

Respondents were also asked what their views were on the arguments that banks should take a more aggressive approach to financing small and new businesses. The reasons being that first, this was a potentially profitable and high growth area, and second that banks, as responsible and substantial corporate citizens had a duty to foster the growth of new enterprises wherever possible.

Responses were sharply divided between councils and Financial institutions. Five of the seven District Councils advocated for a more aggressive approach to develop the nation. They called for liberalisation of their present conservative and restrictive policies, take more risks without insisting on security and develop programmes aimed at helping small businesses. The small business area was seen as "potentially profitable" since "large firms are shrinking". One Financial Secretary put it this way:

> Present lending policies in Zambia are very restrictive. They [banks] give to those who are already established, ignoring those who are new.

Another Financial Secretary urged banks to be more aggressive by being:

> prepared to take more risks without insisting on security, especially for small amounts such as K5,000. [They] should look at the scheme to see what the person is manufacturing, [by visiting him] and supervising ...

Two councils however held that banks "may have their own constraints" and small businesses were risky. One District Financial secretary argued:

> Banks look after people's money. If asked to look after other people's money, we should be careful. This is a risky area, and this is not one of the areas that they may like to take risks in. [Since] they are in business, [they] have to invest in areas where returns would be reasonable.

The view of SIDO, SEP, Ministry of Commerce and the banking community was that unless there were long term prospects for development, banks would not engage in small business financing. Three additional points were advanced by the financial institutions. The first was the notion that banks were primarily responsible to the shareholders. Second that the small business area was risky. Third that social responsibility could and had been exhibited elsewhere and through community programmes. It ought not be based through risking money.

SIDO agreed with the notion of aggressiveness, but warned that it

> shouldn't be taken too far as these [banks] are profit oriented. Unless there are long term prospects for development, they will not engage in that 'per se' to develop.

SIDO however attributed part of the problem to banks' conservativeness due to "their ignorance of what is involved in small scale" and partly to being an under-banked country. SIDO's belief based upon their experience was that "small firms make good future customers for banks".

SEP'S view was that there was a "need for liberalisation from traditional banking to innovative banking", requiring finding "ways of reducing risks". They however admitted that there were limitations as an institution could not be expected to "be liberal" while a client was unattractive.

> Money ... is just one attribute of a project. If all others prove otherwise, there is no point in assisting him.

They called on SIDO to do

> a good job of applying stringent selection criteria of would be entrepreneurs

to make financial institutions' role easier. SKP felt they themselves were duty bound to develop the nation as

> this is why SKP was created. If we do not, we get worried. The problem is how to balance survival and promoting.

The perception of BOZ, Ministry of Commerce and banks was that small firms did not necessarily make good business for banks, were risky and banks had obligations to their shareholders. BOZ Guarantee Department manager for example argued:

> My view is very conservative. It is wrong to say that small firms will be profitable to banks. Only when they are successful will they be profitable. [So] banks by nature of their business must be cautious. If too much debit is written off as bad debits, the branch manager will be thrown out.

One bank manager said that many small firms were costly to administer. He gave an example of a portfolio of K5 million and the costs involved to illustrate his point. He argued:

> instead of lending to a couple of large ones where supervision is little, lending K200,000 per customer required 25 customers. In such a case, you will need a manager, supervisors and four field workers when margins are negligible.

A second bank manager acknowledged that some banks were :

> aware of the profitability of small businesses. [However], we have a duty only where we can see the path of this growth. we are not assisting him if we lend to somebody who will go under. We are [neither] assisting the depositor of money.

He added that it also depended on the structure of the bank, whether it was a retailer or a wholesaler. A third bank manager agreed on the need for aggressiveness. But he warned on the

extent of its interpretation as

> a bank's aggressiveness ... and social responsibility ... should not be based on whether it can finance small firms through risking money... Our objective is to help only those who can stand on their own.

He added that social responsibility can be exhibited through other ways. These were expounded by a fourth bank manager who accepted that the non aggressiveness was

> influenced by non specialisation in this area.... It is a matter of evaluating risks judiciously.

He continued to say that the banking community had shown social responsibility through other many ways:

> We have demonstrated our commitment to agriculture where our lending portfolio of 39% has been the biggest in the country. This has been underwritten from more profitable organisations. Barclays Bank has also underwritten the Lima programme.

10.4.3.4 **LOAN FINANCE TO SMALL FIRMS TO CONTINUE TO BE APPROVED BY COMMERCIAL INSTITUTIONS ACCORDING TO COMMERCIAL CRITERIA**

The responding institutions were then asked for their views on an argument that loan finance to small firms would continue to be provided by commercial institutions according to commercial criteria, with the government playing only a peripheral part.

With the exception of organisations representing the government (BOZ and the Ministry of Commerce), there was unanimity among all organisations that the Zambian Government had a significant role to play or else the situation would remain the same. However, all were in agreement that the commercial criteria would continue to be enforced.

BOZ's view was that financing should be done by the professionals i.e. banks. Government was there to give infrastructure, an incentive only since

> businessmen go into business primarily to better themselves. Government has no money.

The Ministry of Commerce's belief was that all funds which were received by the government ought to be channelled through commercial organisations to small businesses.

All the District Council officials differed greatly with BOZ and the Ministry of Commerce. Their view was that unless the government played a major role, small firms development would not be realised by leaving it to commercial banks. These had their own interests of making profit. It was felt that government ought to influence potential entrepreneurs' attitudes towards government assistance, which was viewed as gifts. Government also ought to instil pride in self-employment among school leavers, it was stressed. It was felt that councils could supplement government's efforts by building structures if it advanced them with funds. One Financial Secretary said:

> Small firms will not take off, unless the government plays a major role, since commercial banks are interested in making profits.

A second Financial Secretary also called upon the government to play a larger role through established institutions or establish its own institutions for financing. He dismissed the suggestion of leaving it to councils as that "will not solve the problems either".

> A third Financial Secretary suggested since since small firms need working finance and premises, government can play a major role. Government can give councils money to make structures to be leased to small businessmen while the operations capital can be financed by banks. There has to be a deliberate policy by the government to assist.

Still a fourth Financial Secretary took this point further. He argued and stressed:

> ... politicians have a big role to play [through an institution such as SIDO in providing loans]."Commercial banks do not finance long term projects. But the government ... can create funds ... and an institution like DBZ to manage funds. [But] financial institutions will continue to play a great part. This is due to the attitude of people regarding assistance from government, which is seen as a gift. Political education is lacking in our people.

He blamed government leaders who re-enforce this type of behaviour, when providing aid, through their pronouncements such as:

> This is a way of sharing the national cake as fruits of independence.[He went on to say people] view such assistance as the minor assistance while the larger cake has been taken by political leaders.

He referred to his experiences when he was a boy. He said:

> I remember ... in about 1965 ... my father paying for my school fees ... [and] using these funds [from the defunct Credit Organisation of Zambia] saying these are gifts, instead of using it on a farm. He has not repaid this money.

He referred to another recent case of a friend of his who worked in the African Farming Company (AFC). He had problems in collecting loans, apparently because the debtors were

> fully backed by politicians. These farmers were initially [when obtaining loans] assisted by the same fullbacks

who were then frustrating AFC's efforts of collecting the money. Such farmers reported to these influential politicians that they were being harassed until that

> friend was removed from that area by the influence of these politicians to another place.

A District Executive Secretary shared similar views on the need for government intervention. But he equally blamed the education system aimed at producing clerks and the subsequent negative attitudes created in Zambians towards self employment by regarding it as degrading. He identified one major problem

necessitating government intervention in order for the country to develop, which was that

> the economy is in the hands of foreigners. [These] can leave any time if things get hot. The manufacturing [sector] is controlled by Indians. These were forced out of the retail business in 1968 [economic reforms]. But they are supplying their brothers in the wholesale and their Zambian born Indian brothers in retail. I am talking from experience.

he emphasised. But asked why many indigenous Zambians were not involved in business he responded:

> The whole system from primary through secondary school to university is wrong. ... The training / school curriculum ... is dominated by jobs. You train an agriculturist, he wants to get a job. But why can't he start a farming business? I am for example ashamed of going and standing on the market stall to sell produce even though I can make more money on the market.

Similar views were echoed by SEP, SIDO and Commercial banks in varying degrees. SEP felt that the reality of the Zambian situation was that

> the Government would have a very small role to play due to economic problems. This is why SIDO is facing a lot of financial problems as the Government can not adequately finance it.

Their overall view was that financing of small scale would remain bleak country wide "but ... we are already making a headway along the line of rail".

SIDO's position was that the government had to play a leading role in shaping small business policies because if "left to commercial banks, everything will remain the same". SIDO however, conceded that in "terms of volume and geographical dispersion", commercial institutions would continue to play a major part. But SIDO advocated for

> a more mature ... commercial criteria ... rather than the present one in Zambia, where banks do not even visit projects.

SIDO suggested and emphasized that the criteria should be based on the

> viability of projects including collateral. [Since] the primary interest of banks is not to get the house, but get back funds, ... [they] should make site visits to evaluate whether the project will pay back. A visit can reduce even paper work for small amounts of money. You can not evaluate a project by paper work. You have to go out to see the project,

Overall, all commercial banks interviewed differed with BOZ and the Ministry of Commerce on the role of the Government. But were in agreement with SIDO, SEP and District Councils. The bank managers believed that Government ought to play a vital role. They all, however, agreed that the strict "criteria would continue to be enforced" as these firms are very risky particularly in the present poor economy.

One bank manager held that the situation would remain the same for quite sometime to come unless the government could play a major role through the institutions it had created instead of leaving it to commercial institutions whose interests were different. He stressed:

> The business of banking is a risk venture. If I have an alternative of lesser risk, I would go for that. If the Government has [therefore] serious intentions it can plan better [and] take a serious role. Banks can not finance from the scratch. No banker would take such a view [as] bankers are the most conservative organisations.

Commercial banks were lastly asked to indicate facilities they planned to offer. All banks did not plan to offer any new or separate facilities to small manufacturing firms. They promised to continue applying stringiest rules, and evaluating an "organisation's liquidity", one bank manager commented.

10.5 ROLE OF DISTRICT COUNCILS

10.5.1 FACILITIES PROVIDED BY CITY COUNCILS

District councils were asked to indicate the types of facilities they offered to small manufacturing firms. All the Councils, except one, did not offer any special facilities or concessions to small business firms.

The one offering special facilities, was Ndola District Council, though they concentrated on the informal sector. But the organisations and their activities "fall within the definition of SIDO's small business", it was pointed out. The Council provided three types of services: 1) land, 2) disused buildings and 3) concessionary normal fees.

First, the Council designated special sites of land for light industries in Masala (along Kafubu Stream), Kabushi (along Chiwala Road), Twapia, Chifubu, Pamozi and Kawama. Second, they also provided disused buildings such as tavern, for example, Maiteke and Zambezi Centre (formerly Youth Centre) for conversions for appropriate use. These were given in whole or partitioned depending upon each individual's needs.

Third, the Council provided concessionary "nominal fees of K6 to K10 [about $1] per half an acre per Month". Where service charges were involved "these are split up in small portions". A service charge of say K2,500 payable upon allocation of a plot to a company in Mushili would mean "Monthly payments of about K6" if allocated to a small entrepreneur.

The Councils, however, "can not give [investment] capital or working capital. We as a Council can only give concessions to land". They felt it was SIDO's responsibility to provide funding. They initially "thought SIDO was a financing body". They therefore extended invitations to SIDO to finance a tailoring, knitting and embroidery project. SIDO went to inspect the building and requested them to produce plans. Their

> first impression was that SIDO had the money. But later heard that they [SIDO] would only refer us to a financial institution. But up to now little assistance has been received [in form of talks and seminars only], but no financial assistance

Council provided the three facilities for four basic reason. First, the Council "took this responsibility because it was the mother of the District". It was felt:

> as a public institution, we need to assist the training of these people [through providing] training facilities and outlets. There is no point in training individuals without providing infrastructure

it was pointed out. Second, it was felt that the Council ought to be "concerned with rehabilitating our own people". Hence the argument of "economic returns" was not supported since their main interest was to solve a social problem. Third, they believed there was a need to provide cheaper industrial plots since

> almost upcoming young men would not afford the plots in industrial area [ranging] from K10,000 to K40,000.

Fourth, there was a necessity to provide jobs since they

> have realised that unemployment has been high. We have to come to accept that promotion [of this sector] would partly solve the problem.

10.5.2 Reasons why No Special Concessions are Provided

Three reasons were advanced as to why no special concessions were provided to small manufacturing firms. First, were the financial constraints, indicated by four of the six councils interviewed. One District Financial Secretary said:

> We need money ... [from] the government [who] has always been the source of funds [for] long term projects. Financial institutions are not willing to finance development.

Second, Councils had not developed different cheaper areas. Unless they do so "small businessmen have to pay the same development costs".

Third, serious thought had not been given to the issue as four District councils put it. One District Financial Secretary said that council was not aware that it was "necessary [to do so]. But ... we would be willing to help". A District Commercial Secretary added :

> This is the policy that we inherited from the government [after Local Government Reforms in early 1980]. If a case is put up for small firms, it can be considered.

He however, admitted that the laws needed changing as they were too old to cater for present needs. He also blamed MPs who were not taking serious steps to rectify the position by amending the laws.

10.5.3 CRITERIA USED BY COUNCILS

The criteria used for providing facilities were stringent based upon land use laws requiring councils to allocate certain development plans for particular purposes. It was unlikely that small businessmen would meet them.

These were financial viability, need to have a manufacturing licence and the need to meet health department regulations. The last two were also based upon other laws which also made different demands on the entrepreneur. The other minor requirements were the need to be a Zambian citizen for sole proprietors or Zambian directors for a corporation. UNIP Party membership was also required. (UNIP is United National Independence Party - the ruling party in a single party State).

The need for and criteria for council "building planning structures were defended on grounds of "beauty and safety measures", claimed one District Financial Secretary. He emphasised:

> we can not allow the town to turn into a ramshackle .... Backyard is tolerated for carpenters and tinsmiths.

The requirements by Ndola District Council in the designated sites for small firms were more relaxed. The basic ones were entrepreneurial skills, nominal capital and ability to pay for nominal service charges and little equipment. They did not concern themselves with ensuring that other laws such as licenses, and health and safety regulations were complied with.

10.5.4 Future Facilities Councils Plan To Offer

Three of the seven councils had no plans for a positive small business policy. One council, Chingola District, had allocated an area to SIDO for the later to develop and erect workshops to lease to small scale. Luanshya District Council had no plans although they "would wish to provide an area where small firms can operate". Lusaka Urban District Council had no definite

plans as no one had approached the Council. But if a case was made they were prepared to consider priority plot allocation to small firms as opposed to current trend. They conceded that service charges of

> K20,000 to K40,000 in Lusaka was to high for a person who may have very little.

Ndola Urban District Council intended to provide more premises by adopting a plan similar to one they were using in providing stalls at markets. There, applicants were "assisted with building plans", advised on using the "same materials" as other developers on the site, and in the provision of

> supervision from the drawing up of plans through foundation until the structure is completed.

This was planned to begin with Maiteneke at Main Masala for industrial plots.

10.6 SUMMARY OF RESULTS ON STIMULATORY POLICIES

It has been shown first that banks did not offer any special facilities to small manufacturing firms. Small firms competed on the market for facilities available to all potential customers. In some cases these small manufacturing firms were discriminated against by the wholesale banks who required a customer to maintain a certain minimum in the current account. Second banks did not intend to offer any new facilities specifically for small firms.

Third, that although banks viewed security demands as the last thing, it appeared to be a major constraint to small firms in qualifying for loans.

Fourth, that it was accepted that interest rates were very high, but that little if any could be done about it since it reflected the scarcity of money in the country and was also controlled by the Bank of Zambia. A suggestion to offer reduced rate was unacceptable unless the Government could underwrite the cost.

Fifth, the majority of respondents felt that the same levels of interest rates applying to other organisations ought to be applied to small firms.

Sixth, although a more aggressive approach to financing small firms was superficially attractive, the majority of the respondents felt that it was not practically possible since commercial banks were in business. Their primary interest was to safeguard shareholder's interests.

Seventh, there was unanimous agreement that banks would continue playing a role in financing small firms using their "traditional" commercial criteria. The financing would be operational capital and not start up capital. There was also consensus that the government ought to play a major role in giving direction in the development of small manufacturing firms. Without this, the situation would remain bleak. Commercial banks had a commercial, not developmental interest.

Eighth, the Government was urged to help change the negative attitudes of Zambians towards self employment, which was regarded as a career for those who could not find jobs. The Government was also encouraged to instil in people a sense of responsibility towards repaying loans advanced by Government institutions, instead of existing trend where people viewed it as "presents" from the government for the hard won independence.

Ninth, it has also been discovered that although councils were critical of banks in the latter's failure to provide special services to small firms, all (except one of them), were not providing any special concessions. They did not plan to offer any in an immediate future. But three out of seven were prepared to consider offering special privileges to small firms if they were approached. In addition, one council which already provided some facilities, had plans to expand its services.

Evidence therefore showed that the prevailing small business policy in Zambia was not favourable to stimulating small business formation. SIDO was faced with financial constraints. SEP had however, taken serious concrete steps in promoting small firms. Financial institutions and councils (except one) would continue with their current unfavourable policies towards small firms.

CHAPTER 11: DISCUSSION, COMPARISONS, IMPLICATIONS AND RECOMMENDATIONS

11.1 INTRODUCTION

This chapter aims at first, providing an overview discussion of research findings by comparing them to findings elsewhere. Second, evaluate the implications of the findings of this research study on the role of small scale businesses in Zambia particularly in increasing the small business population and generating more employment. Third, make recommendations to SBIS, small business promotion agencies, small business supporting agencies, small businessmen and the Zambian government.

11.2 SUMMARY OF FINDINGS

Research findings indicated that the problem of unemployment, particularly structural unemployment was very serious. About one third of a million persons who were in employment were literary supporting a population of about 7 million people. Many factors including economic, social and political and cultural contribute to the unemployment problem. Research study examined some economic social and political impact on unemployment. One social impact, urban concentration, revealed that this problem would continue for a long time to come. Zambians were not responding to President Kaunda's call to go back to the land. Although respondents viewed where parents were born as their home, there was a great tendency for them and their parents to stay in urban areas. Research results indicated that small firms had a major role to play in

alleviating the unemployment problem in the manufacturing sector. Small scale businesses created more employment in the long term than large businesses. However, the economic, social and political climate was not conducive to accelerated development of the small scale businesses in Zambia. Evidence had shown that an integrated small business policy targeted at small scale audiences was needed in order to achieve results. This meant that the policy had to embrace educational institutions (and educators), small businessmen, promotional agencies, small firms supporting agencies as well as relevant government departments. Leaving this responsibility to one institution would prove fruitless.

Results showed that although a good background has been laid in the area of small firm promotion by the government, the policy was virtually ineffective. SIDO, the main government wing for small business promotion has been incapacitated by inadequate funding. Contradictory laws also existed which hampered formation of firms by small businessmen. These included the investment Act (requiring manufacturing licence), Town and Country Planning Act and Factories Act. Financial institutions negatively discriminated against small businesses. Evidence was that this would continue despite the introduction of the guarantee scheme by the Bank of Zambia. District councils, very active in western societies, had virtually no small business policy.

Overall, a government policy of assisting small businesses, particularly aspiring ones was appreciated. But leadership code was viewed as a hindrance to small business promotion. It was

also seen as an encouragement for Zambians to invest money in foreign countries. It did not enable retiring government officials to secure their future.

Pinning hopes on grade VII school dropouts to form businesses to absorb unemployed youths was shown to be incorrect. Formal small business formation, particularly of organisations capable of providing greater opportunities of employment was a complex and demanding task. It required an average period of 12 years working experience, adequate finance, skills and know how, all of which were not possessed by grade VII dropouts.

University graduates appeared to be a promising target group for encouraging entrepreneurship. They had the necessary education and the majority hoped to form businesses in future. They were however constrained by inadequate preparation for business start up by prevailing educational structures, lack of capital and experience. SBIS educational system, like others in the country was viewed as preparing graduates for executive positions in large organisations. The accounting degree programme at SBIS was also heavily criticised for failing to produce graduates who would not be required to undergo further educational programmes before training by gaining experience as prospective accountants. Some SBIS courses were also seen as useless while others were seen as valuable. There were calls for the University to interact with businessmen to promote understanding of SBIS degree programme, enable students get practical experience while at the university and acceptance of the accounting degree.

The next sections discuss the main findings beginning with SBIS, and offer recommendations for each area before going to the next. Discussing of government policy naturally begins with emphasis on the process of encouraging potential entrepreneurs into business start ups. In this study, this meant assessing hypotheses relating to educational programmes offered by SBIS.

11.3 ADEQUACY OF SBIS DEGREE PROGRAMMES

The type of study carried out was not intended to measure adequacy of degrees but to measure attitudes of SBIS respondents towards the adequacy of the BBA and BAc degree programmes.

Results revealed that in general SBIS respondents had favourable attitudes towards the adequacy of the two degree programmes. First, some courses were however not found suitable, others were deemed to have been superficially covered. Second, SBIS courses were found suitable to work in large firms and small firms, but inadequate for starting business. Third, the BAc degree was determined to be inadequate for graduates to take up appropriate jobs in the accounting field. Fourth, results also indicated that there was lack of communication between the SBIS and industry. This was said to be important in order to enable students gain industrial experience while at the university and accelerate acceptance of the SBIS degree. Evidence therefore appeared to indicate that the general broad structure of degrees should continue to be offered by SBIS. The general structure of courses should also be maintained as most of the courses were found suitable. There is however a need to make a few course changes as detailed in the next paragraphs. The BAc degree programme needs to be revised or at least strengthened.

11.3.1 UNDERGRADUATE COURSES

1. BS 130-Business and its environment. It is recommended that BS 130 be scrapped since it was regarded as the most useless course by all the streams of graduates, it is unlikely that all of them could be wrong. There appears to be no justification to continue offering a course which is of doubtful value to many students.

2. BS 380-Production Management. Should be revised to make it more practical oriented. It is an important course since it is aimed at introducing students to product development process. In a developing country such as Zambia, which depends heavily on imports, an orientation to the stages of bringing a product to the market is important. This cultivates qualities needed to make Zambia production oriented. There is however a danger of being too theoretical and detached from practical realities and the Zambian context.

a) Teaching of the course be related to the Zambian environment.

b) The course be taught preferably by a person with business production experience.

c) To provide appreciation of production processes, and gaining of some experience, students in their third and fourth year be attached to firms involved in production. In addition to other course requirements, student evaluation may be based on submitted termly project reports and evaluation by the manager who supervised the student. Fortnightly tours of small groups of students to manufacturing firms could be organised. A student could then be required to submit reports on his experiences.

3. BS-210 and BS 310 Since Macro-micro economics are normally theoretical courses it is easy to make them more practical. A study can therefore be commissioned in conjunction with concerned lecturers to determine how practical aspects can best be incorporated in the courses. But as for BS 410 - International Trade, it is recommended that prevailing import/export practices and procedures be incorporated into the course. Company tours can also help.

4. BS 340-Quantitative Methods and Computers. The importance, and benefits of computer technology in the world today cannot be over emphasised. Most institutions and companies, as graduates indicated, are being computerised. Therefore the theoretical orientation of computer programming in one course only is out-dated. What is needed at SBIS is computer use where students can do interactive small projects on main frame or personal computers. Programming could be offered, as an option if computers was offered as a major. It is ridiculous to offer it in its present abstract form where students have not even been able to see a computer. It is therefore recommended that:

a) The Copperbelt University provides computer facilities. This can be done by

1) linking up with the University of Zambia Lusaka for students to have access to main frame computing facilities;

2) purchase of micro-computers and relevant software programmes for use by students;

3) offering a more relevant computer course on use of computer. It should include practical application aspects. A course such as research methodology can be aimed at computer use;

4) requiring students to submit a practical small research project utilising computer usage;

5) the Copperbelt University investigates the possibility of linking up with Zambia Consolidated Copper Mines (ZCCM) computer unit in Kitwe, if linking up with university of Zambia is prohibitively costly. Time sharing with ZCCM can also be looked into;

6) the Copperbelt University makes arrangements with ZCCM computer unit for the later to provide computer training to students, a couple of days per week if the first two alternatives are not feasible. The least that can be done would be to enable students visit ZCCM's computer unit a couple of times per term for them to have basic grasp of computer use.

11.3.2 THEORETICAL APPROACH TO TEACHING AND LACK OF INDUSTRIAL EXPERIENCE

Research results showed that there were common complaints related to:

1) lack of opportunities for students to have industrial experience;
2) theoretical experience;
3) inexperienced academic staff.

1. The need for practical industrial experience

This aspect is an important one. This has led SBIS to finding ways of affording vocational employment to students, particularly those in the third year. Special emphasis has been put on enabling BAc third year students acquire some practical

skills in meeting the professional track BAc requirements (for degree programmes offered, see appendix 8A2). Despite SBIS' efforts to acquire some practical training, there have been practical limits, particularly in recent times when most organisations are cutting on staff requirements due to economic constraints as seen earlier.

These problems notwithstanding, some other avenues should be attempted. Graduates for example suggested that students be engaged in organisations for the sake of training even without pay. Gaining industrial experience should therefore be the focal point as opposed to monetary incentives.

Looked from a different angle, this should be an attractive proposition since organisations are in fact opening doors and providing its facilities and time of staff to teach the student who it knows would leave after three months. In a sense, the student should be made to pay for receiving the training. Therefore working without pay or at a nominal rate is not as absurd as it superficially looks.

The university should therefore seriously consider requiring all students to be engaged in practical work in the 2nd and 3rd year. The later could be encouraged to do research oriented projects.

Second and third year students should do consultancy for small businessmen, who as seen, lack management and accounting skill. A small fee could be charged to be shared between the students and the university on a pro rata basis, with students taking say 75%. Students could work in small groups in conjunction with a lecturer who can introduce them to small

businessmen before leaving them on their own to identify, investigate analyse and provide a practical solution to problems facing a firm. Specialised assistance can be sought within the university where a technical bottle neck cannot be solved by the group of students.

The school of environmental studies, could for example be involved in construction projects.

It is therefore recommended that:

a) all students in second and third year be required to do practical training at a nominal rate or without pay;

b) second and third year students form consulting groups and a lecturer be in charge of group to provide management and accounting services to small businessmen at a nominal fee.

2. The Need for practical industrial experience by academic staff

SBIS should realise that since most of the Zambian academic staff have been trained through the staff development programme, immediately upon obtaining first degrees, they cannot naturally be expected to have acquired industrial training. But this experience is critical in a field like management and accounting, if they should be expected to provide their best contribution.

The university's policy of requirements of achievements in the areas of contribution to teaching, life of university and service to the community before promotion are theoretically sufficient for a member of staff to improve himself. But apart from service to university which is still possible at a small school like SBIS the others are not easily attainable. This is due to lack of opportunities and existence of a contradictory

university policy. The policy constrains members of staff to engage in private business, consultancy or research either sponsored by the university or an outside agency. Four major ways are open to SBIS to provide the required practical experience to members of staff and at the same time enable students gain industrial experience. This means being more profit oriented by reducing costs and increasing returns by embarking on business related projects.

One radical approach requires SBIS to establish an industrial training programme by identifying committed lecturers who need industrial experience and seconding them to firms in industry for a one or two year period. The university should be responsible for meeting the salary costs of the seconded unless the organisation is willing to fully or partially meet the costs. At present the existing leave of absence is limited to few situations where the government appoints a lecturer to a position in a ministry needing his services for a number of years with the possibility of returning to the university. What is being proposed here is to make it obligatory for all new members of staff to undergo such training. The long term immense benefits will outweigh the costs of training for a period of one to two years. This approach is practised by the university of Stirling's department of business and management.

A second radical way would call for a change in university's policy of allowing academic staff to start businesses such as consulting firms individually or in groups. They should then be allowed to get a greater share of the profits if they use university's time. Distinguished business schools in the U.S.A.

for example have lecturers who are business owners, have consulting firms or are members on boards of directors in private firms. The university of stirling's department of business and management allows academic staff to engage in consultancy during "free" days allocated to them. In addition a section exists in the department charged with encouraging group consultancy. Participants get a larger proportion of revenues than the department. In some situations, the university also gets a proportion.

The advantage of such programmes is that lecturers would be teaching from practical aspects and experienced problems contrary to the existing situation at SBIS. The suggestion above for group projects can be accomplished through the proposed business management centre under long term plans of the university. Since most Zambian lecturers at SBIS are recruited immediately after obtaining the first degree and sent for further education, it should not be surprising that their approach to teaching is theoretical. It would be unfair to expect otherwise when they themselves had no chance of acquiring industrial related skills. It is only by engaging in business that they can gain this.

The third approach would need SBIS to have a close corroboration with SIDO and small scale entrepreneurs on projects of mutual benefit. This would be beneficial in providing the necessary experience to lecturers and students and enable both to relate classroom theories with actual practices in the industry. This can again easily be accomplished through a business management and accounting services. Limited companies employing full time facilitative staff can be formed. Students could work on projects during breaks. A part from fulfilling the role of

training academic staff, SBIS would generate extra income to improve its financial position and offer a variety of degree programmes. These can be offered to neighbouring African countries at a cost and thereby earn foreign exchange as opposed to current policy of limiting foreign students to 5% only. Present practices of British universities are contrary to this. It is well known that American universities have long been following the practice of recruiting and charging for the cost of education.

The fourth method of providing some practical experience to members of staff is for the university to liberalise its academic research policy and allow academic staff who privately engage in research commissioned by outside agencies to keep the income so generated. The present policy of requiring members of staff carrying out such research to be governed by university's internal research policy including forbidding receiving a higher daily subsistence rate than the university's own rate when conducting research away from his home is retrogressive. This is so even if the sponsoring organisation is prepared to pay more. This ruling was passed by the Senate Research Grants Committee at its meeting held on 10th April, 1981 (UNZA, SEN/81/FO/22: 1). item 2.2 noted that external agencies paid researchers subsistence allowances ranging between K24-K54 per day per person. But item 2.5:

> ...AGREED on revised rates of subsistence for fieldwork within Zambia as follows:
>
> > Academic Researchers: K20 per day for the first seven days and K12 per day thereafter.

Item 2.6 further clarified that it was AGREED that the rate

> of K20 per day would only be paid for the first seven days in a <u>new location</u> because of the initial extra expenses such as the need for hotel or hosted accommodation during the first few days. The higher rate of K20 per day would not be paid for a later return to a previous location.

Item 2.8 made it very clear that externally funded research was included when it said:

> <u>AGREED</u> that the above standard subsistence rate (see item 2.6) would apply not only to research funded by the university but also to all future agreements on research funded by external donors or commissioned by external donors.

Further, it was agreed (UNZA, SEN/81/FO/22: 1) item 2.9 and (UNZA, SEN/82/FO/31: 2) on 30/7/82 that:

> ...all future agreements on research commissioned by external donors shall be charged a consultancy...flat rate of 14% of its total budget.

That is regardless of the income generated by the member of staff. Although the rate has now been increased, the principle still remains the same. These kinds of policies are not conducive to encouraging research. It is unquestionable that accommodation and food expenses do not decline by merely staying longer than seven days or returning to the same place later. What is most baffling is where even those members of staff who can manage on their own to obtain outside projects are forbidden to get more.

The university cannot expect to recruit already experienced personnel from industry with its unattractive conditions of service (including poor salary). There are basically two alternatives available. These are either the university gives students and academic members of staff opportunities to gain industrial experience or they remain outside the business

environment and continue theorising. As professors Hally and Hunt (Dec., 1975: 6) whose recommendations were instrumental in the establishment of the school:

> ...Teaching without research is arid and unsatisfying for both teacher and taught, and it is of the essence of a university.

The views expressed on research are not intended to demean the importance attached to research by the university of copperbelt. Research and publication in fact make up the corner-stone for academic promotions in the university. The major criticism of the present research policy is that it lacks practical support and some clauses are contrary to the spirit of encouraging research. It should also be realised that academic research is simply one aspect of academic development particularly in a business school. It cannot substitute industrial experience.

It is therefore recommended that the university revises its policy relating to recruiting and retaining of academic staff by enabling them to gain industrial experience by:

a) allowing them to own businesses;
b) requiring that new members of staff be seconded to a firm in industry for a period of at least two years;
c) permitting them to engage in research and consultancy without present hindrances;
d) establishing consulting groups within SBIS through the proposed Business Management Centre.

11.3.3 NOW ACCEPTABILITY OF THE ACCOUNTING DEGREE

11.3.3.1 HISTORICAL BACKGROUND TO DEVELOPMENT OF BAc

The Mwanakatwe Report on the Long Term Development of the University of Zambia (June, 1977) established the school of Business and Industrial Studies. The committee obtained assistance in the planning of the school from reports on a visit to the University of Zambia 9th to 14th December, 1975 by professor Desmond Hally, professor of Accountancy and Business Finance at University College, Dublin and professor Norman C. Hunt professor of Business studies at the university of Edinburgh.

In their report Hally and Hunt (Dec., 1975: 5) stated as follows on the need for accountancy education:

> The one message which came through to us more clearly than any other was the need in Zambia for trained local accountants.

They were "in no doubt" that the role of the university in the provision of accountancy training was "an important" one. Their discussions convinced them that

> whatever non-university programmes may exist or be developed, there is a real and felt need for a degree course in Accountancy at university level.

One of the reasons for this view was that the non-university courses existing at that time did not attract sufficiently able candidates. This was because better candidates with good passes opted for university courses, leaving unsuitable candidates for the accounting programmes. This resulted in high failure rates in professional accounting leaving a gap for accountants. They therefore recommended that the new school should:

...offer a degree curriculum in Accountancy firmly based in the social sciences and broad enough to meet the needs not only of the accountancy profession but of other important sectors of the Zambian economy

One of the most important adhered to recommendations from Hally's and Hunt's report (1975: 8) item 28 which guided the development of BAc curriculum was the need for a clear distinction between university degree and diplomas offered by NIPA and Evelyn Hone College. The former had to:

> concentrate on relevant academic education, leaving to the later the specific technical training needed...

The Mwauluka report (1977: 66) endorsed this stating:

> ...The former must be seen as providing intellectual training whereas the later will continue to offer the specific technical training needed...

Graduates with an accounting major were expected to "proceed not only into professional accountancy but also into finance, banking and management generally..."

Honouring this approach of complete separation between provision of accountancy education and training has however resulted in discrepancies between the needs of the market (industry) and the products (graduates).

The major reason for the discrepancy has largely been due to inability of the university to convince overseas professional bodies to exempt BAc degree holders from taking diploma examinations. It was envisaged by Hally and Hunt (1975: 8) that degree holders majoring in accountancy:

> would be exempt from the diploma examinations. Both diplomates and graduates would be required to undertake a specified period, say two years, of approved practical experience before taking a final professional examination designed and moderated jointly by the Department of Technical Education and a properly constituted professional accountancy body which might develop..."

The problem was that there was no properly constituted professional body. The country relied, and still does so, on overseas examinations such as ACCA and ACA as seen in chapter 8. A professional body was legally constituted in 1984 to promote the Zambian Diploma of Accountancy. Zambia Diploma of Accountants Association yet however offer or regulate professional examinations. The irony of this development was that foreign qualification including neighbouring Zimbabwe was recognised and included in the Act. But BAc was excluded. Here lies the major obstacle.

11.3.3.2 DEMAND FOR ACCOUNTANTS

The demand for accountants in Zambia is as pressing as it was almost 15 years ago. At that time, estimates were put at 600 by Mr. A.W. Samarasinghe, Adviser from the Commonwealth Secretariat to the National Institute of Public Administration (Hally & Hunt, 1975: 5). It was estimated that it would take 20 years to train local accountants to replace expatriates with facilities existing at that time.

A recent study commissioned by EEC (Bardouille, 1987: 18) estimated the need for professionally qualified accountants to be about 1,250 by the year 2000. In 1985, the number of posts filled was 750 of which 600 were held by non-Zambians (see table

Table 11.1 Demand for Accountants In Zambia, 1985-2000

	1985 actual	estimated 2000 year	Movement
Total number of posts	950	1,250	+300
Number vacant	200	100	-100
Number of posts held	750	1,150	+400
Number held by non-Zamb.	600	550	-50
Number held by Zambians	150	600	+450

source: Bardouille, 1987 table 7 originally from: Accounting Training in Zambia, draft report prepared by Stokes Kennedy and Crowley consultants and commissioned by the EEC, February 1986

11.3.3..3 IMPLICATIONS OF PRESENT PREDICAMENT

It is clear that the initial major purpose of offering the degree curriculum in accountancy was to fill a felt need for accountants. It is also clear that this demand still exists and will continue to exist. It is explicit that BAc degree holders were expected to be exempt from diploma examinations. But they had to work in the field for a couple of years and take final examinations before being confirmed as accountants

Research evidence has however revealed that the BAc degree was not accepted in industry as adequate education needing only industrial experience and final examinations. Instead, graduates undergo the whole process taking another three to four years and sitting for most of the examinations before taking the required fieldwork experience. It was demonstrated by the large proportion of 1 out of 2 graduates who had either completed or were studying for professional accountancy. Graduates further

stated that they were regarded as raw material suitable only for further training. This made them frustrated because they felt that they had wasted four years at SBIS.

The view that the concern of the university, as is the practice in developed countries, is to provide academic qualifications, not professional training (officially shared by SBIS), is in the view of this researcher misplaced. The contention that professional training can be obtained at the graduates' choice after graduation is misleading to students. Some of these select SBIS believing that the process would lead into professional qualification. If the graduates are 'half-baked' (as they referred to themselves) upon leaving the university, then SBIS is failing to meet its expected role as envisioned when the programme was instituted. The reasons are vivid.

First SBIS cannot exonerate itself from failing to meet its obligations by comparing itself to other universities, some of which have been in existence for over 200 years. These operate in different environments where there are hundreds of other universities, technical institutions and private schools or institutions, all of which supplement one another in providing manpower requirements. Zambia has only one school of business and no recognisable local professional accounting body which can provide training to the public. The two technical institutions have been confronted with problems. Zambia Consolidated Copper Mines prepares its trainees for London based ACA and ACCA.

Second, the trend in these developed countries is for the universities to have close association with professional bodies in order to seek exemptions on behalf of undergraduate students. Masters degree prospects are excluded because of the theoretical nature of the taught courses at that level, Mr. A. C. Storrar of the Accounting Department at the University of Stirling told this researcher in an interview. He is a professional accountant by trade. But he is in charge of co-ordinating with professional bodies. This approach is the same at all other Scottish universities as a telephone with the Head of Edinburgh's Department of Accounting revealed.

The first degree is more acceptable because it has similar features to the professional courses which are normally narrow and detailed. The present accounting curriculum at the university of stirling for the first degree offered as from 1988 would for example, enable graduates to be exempted from Part I and some courses in Part II. But they would still be required to sit for Part III. The three main professional accounting bodies require working experience of about three years before finally qualifying after obtaining the first degree. Public (sector) Chartered Accounting Association insist that the aspirant works in one of the public accounting firms such as Deloitte & Haskins. Management Accounting professional body demand that the candidate works in a manufacturing firm. But Certified Accounting body (ACA) is more flexible in allowing the person to work in any organisation. It therefore appears that it takes about 6 years (3 at university and 3 working experience) before one qualified.

The experience of American universities has been to enable the student complete professional examinations while still at the university.

The researcher had a telephone conversation (on 27th September, 1988) and wrote to professor Hunt (now retired) asking him what his opinion was in the light of recent developments in providing accounting education by universities and the problem confronting the graduates. His response was that he was not in a position to comment on the findings since he was quite out of touch with the current situation in Zambia. He did not get a feed back after submitting the report to the university almost 13 years ago. In his letter to the researcher, dated 4th December, 1988, he stated:

> All I can say is that the BAc degree proposed in my report was never intended to be a complete professional qualification in accountancy but rather an educational preparation for it. ... If graduates and employers expected otherwise that is their error, not a criticism of the degree proposal.
>
> There are differences of view about the proper role of university in preparing students for a career in accountancy....

Reference to appendix 12A.2 will show that SBIS has attempted to incorporate the professional component in its new curriculum which divides the programme into professional and non-professional tracks. But it appears that the differences are in the fourth year in that the former take seminar in accounting and internship (practical training over a 3 month period). It is however doubtful whether this is adequate to prepare the professional track students to acquire professional qualifications. The result should not change greatly.

11.3.3.4 RECOMMENDATIONS ON BAc DEGREE

It cannot be denied that a problem regarding the BAc degree exists. The onus is on SBIS (not graduates) to resolve it by taking the necessary steps. It is advisable for the school to adopt a marketing concept by offering what the customers want. Since Zambia has limited resources, their wasteful utilisation by producing 'half baked' accountants should not be allowed to continue. The big question is why SBIS should continue producing graduates who are not wanted by industry. What is wrong with SBIS combining the two roles of providing education and training instead of expecting graduates to be trained abroad and spend a further three to four years? The cost of maintaining a student in U.K. is exorbitant at about 6000 plus fees of between 4000 and 6000, a total of K180,000 for these two items only.

The following alternative courses of action are therefore strongly recommended to SBIS:

1) considers the possibility of offering professional qualifications option to graduates by extending the programme from four to six years, but maintaining the four year terminal degree.
   a) By enabling successful graduates to pursue a professional option for a further two years, work in industry for another two years before qualifying.
   b) by corroborating with Zambia Institute of Certified Accountants Association (ZICA) who should endorse the course programme in order for diploma holders to be recognised. They could also be invited in regulating the course and provide teaching services.

c) initially co-ordinate with a professional body and tailor the course offered to their programmes in order for SBIS diplomates to be acceptable in other countries. Eventually mount its own local programme. Consultation with the University of Zimbabwe which has integrated its degree programme with professional requirements can be considered.

2) seeks exemptions from Parts I and some courses in part II from overseas professional bodies through co-operation with them on the required course contents in order to meet their expectations. This should include preparing students and giving them opportunities to sit for and complete professional examinations by the time they graduate over the present four year period. They would then be expected to work in industry for two years before qualifying as professional accountants.

3) leaves its present programme basically as it is, but makes some minor modifications and convinces professional bodies for more exemptions to enable students to obtain professional qualifications in a shorter period of time upon leaving the university.

The first alternative is the most beneficial to the students. It is accepted that it is the most controversial to the university due to financial implications. The benefits to both the university and graduates should however outweigh the costs in the long term. This approach would also meet the need for non-professional accounting graduates to provide their services to other sectors of the economy such as banking and insurance. The cost aspect can be overcome if the government

which finances over 90% of the student population can be convinced of the benefits of this option.

The additional two years of course work should not scare candidates because they will have the option of terminating and obtaining a degree after four years. Further, evidence in this research has shown that when graduates pursue foreign professional qualifications, it already takes long before they complete their studies. It may be recalled that only 11% out of 73% who had embarked on the professional qualifications since 1981 had qualified by 1986. There is no reason why graduates should not be prepared to spend an extra two years to ensure that at the end of the day, they will be recognised by the business community.

These recommendations are not meant to deny the useful efforts SBIS has taken including attempts to seek exemptions, membership to ZICA and curriculum changes which became effective in 1986. The important point is that while these steps are welcome they have been inadequate. The cosmetic changes to the curriculum, for example would not enable employers to distinguish between those who pursued the professional track and those who did not since at the end of the day, both groups get the same BAc degree. The real difference is clouded since the professional track merely required one to take two different courses (auditing and seminar in accounting) and "participate in practical internship programme during the long vacation after the second and third year of a student's studies" (SBIS, 1983: 20) (SEE 12A.2 and 12A.4). Note particularly that since seminar in accounting is also an elective, it is possible for a student in financial tract to take it. Further, opting for a professional

track is done in the fourth year (see 12A2.2). This implies that the internship is done before opting for a professional track. This therefore means that it is possible for both groups to have done internship before the fourth year. Another implication is that since internship is done at the end of second and third year, the process is nothing more than vocational employment. Supervision and evaluating of students is likely to be ineffective and unrelated to professional track since others can also do it. The end result is that the only difference between the two groups is one course i.e. 421 - Auditing. It is therefore unconvincing that this would differentiate the professional accountant from the financial accountants.

11.3.4 ADEQUACY OF SBIS DEGREE FOR AND ATTITUDES OF GRADUATES TOWARDS STARTING BUSINESSES

Research results indicated that more graduates felt they were adequately prepared to work in large firms than in starting their businesses. Chapter 2 appendix 2A.7.8 which dealt with provision of education and training would provide the answer. This is due to the traditional educational systems which emphasise the large firm. The graduates also indicated that the expectation of occupying executive positions in industry is imbued in them during the training process.

Evidence indicated that the majority of students and graduates (83%) were willing to start businesses. In this respect, they are different from their counterparts in the U.K. where graduates had a major negative attitude to declaring an aspiration to create wealth (Thomas, cited in Dale, Nov.,

1987:4). The major constraints were capital and experience of running a business.

It is possible for SBIS to initiate graduates into the rudimentaries of business start ups by offering small business courses. This would generate interest in students thereby encouraging them to opt for business formation upon graduation. Three approaches which can be targeted at third year students are possible by offering (Faulkner, Nov; 1987: 13-14) an elective, a core course or a combination of the two. Since SBIS has already an elective course in small business in its new programme, offering a core course for a major should not prove too difficult. It is important to be aware of possible "academic conservatism" which some institutions in the U.K. have experienced including (Faulkner, 1987: 2):

1) lack of academic credibility;
2) insufficient literature;
3) students unlikely to be interested;
4) staff unlikely to be interested, or unlikely to be available;
5) the subject is adequately covered elsewhere.

Graduate Enterprise programme which aims at fourth year graduating students and graduands within the previous year could be initiated. This can be done in association with SIDO, the government and private sponsoring organisations. It is a common new approach in U.K. higher institutions of learning aimed at promoting entrepreneurship among graduating final year students (see chapter 2 appendix 2A.6). It takes various forms, but basically it takes the graduate through the whole process of firm formation. The programme begins with identification of a

business idea by the student himself/herself and going through project preparation and business planning up to the point where the candidate creates an organisation. Practical support including financial for starting off is provided through out the process, which may take up to 6 months or one year. Continued guidance and support is given as required for the next couple of years before leaving the new entrepreneur on his/her own.

Evidence indicated that both students and graduates would like to start a business in future. Evidence in this study from practising entrepreneurs indicated that about 42% had either achieved college or university level of education. But chapter 7.2.3.2 also revealed that the most common method of business ownership is starting from the scratch (80%). It therefore seems likely that one potential target group to concentrate efforts on would be these graduates who 98% of them presently seek employment although 85% of them would like to be self-employed. Social development model of entrepreneurship theory states that one route to promoting entrepreneurship is to remove environmental constraints and provide training needs to enable an individual to create a business (see appendix 2A.5.3). In this regard, government and educational institutions can be instrumental in accomplishing this (appendix 2A.6 on provision of education and training). It is therefore recommended that:

a) the government in association with SBIS SIDO and the business community initiate Graduate Enterprise Programme in order to encourage business ownership among graduates for their careers upon graduation;
b) SBIS introduces small business core option and provides more elective courses on entrepreneurship.

11.4 [redacted]'S NON-FISCAL POLICY TOWARDS ENTERPRISE FORMATION

Entrepreneurship theory suggests that there are several ways for individuals to become entrepreneurs. The traditional trait theory has no overwhelming supportive evidence. Psycho-dynamic model provides evidence of individuals who have become entrepreneurs as a result of their internal determinants. The social development model reveals supportive evidence for individuals who have become entrepreneurs through external influences (see appendix 2A.5.5 through 2A.5.4). Other evidence has shown that all these are possible approaches (Chell, 1984).

Evidence from chapter 7 supports Chell's model. This is because no single theory explained the process of becoming an entrepreneur in Zambia. It was seen that business owners came from different backgrounds (working experience, education, parental business ownership) and for different reasons (personal achievement and independence, money and security). One overwhelming evidence was that becoming an entrepreneur in Zambia was demanding, requiring starting from the scratch by most individuals.

The implication for the government is that it can play a key role in fostering business creation by manipulating environmental factors. The opposite is also true that government can covertly or otherwise stifle entrepreneurial formation by implementing policies which are not conducive to enterprise formation.

This study revealed that students, graduates and businessmen would endorse a government policy aimed at promoting upcoming small businesses (see chapter 9).

11.4.1 LEADERSHIP CODE

These respondents however believed that some policies such as leadership code contradicted the very essence of economic development through formation of more businesses. The main arguments against the code were based upon several issues. First, was its definition which was inclusive of almost every working Zambian. Related to this was the difficulty of implementing it. An overwhelming majority of 84% therefore felt that leaders have been dishonest in implementing the code. Only 4% thought they have been sincere. Third, was the issue of forbidding the very people who had capital or the means or at least contacts to raise the required capital or the means or at least contacts to raise the required capital. As a result the requirement that leaders should not own businesses was rejected (60% compared to 30% favouring it). The consequences of leadership code were clearly spelt out including discouraging economic development, reducing the growth rate of businesses, encouraging investing resources in foreign countries (chapter 8).

It is very clear that restricting ownership of businesses to those in the private sector only does not encourage socialism. Opposite results are in fact achieved. Since by definition, leadership code excludes all employees, except a small proportion of 25% in the private structure (because of the nature of the economic structure), leadership code effectively encourages capitalism of the highest order (see table 11.2). It is therefore not surprising that an average businessman has two businesses, most of them having three as chapter 7 revealed. The researcher's arguments in chapter 3 that by definition the code

'de facto' excluded almost all people with capital from investing in businesses has been supported by research results.

Table 11.2: Breakdown of Formal Employees by Sector and Proportion Non-Zambians (December 1980)

Sector	Number of Employees	Proportion of Total	Proportion non-Zambian
Public Sector	141,280	37%	3.9%
Parastatal Sector	144,190	38%	5.4%
Private Sector	93,830	25%	7.0%
Total	379,300	100%	5.2%

Source: CSO, Monthly Digest of Statistics, June/July 1985 Supplement.

The consequences of such a policy are obvious as respondents have pointed out. If a working person is not allowed to invest, start a business let alone save a meagre K2 000 in a bank, the first question is what she/he is expected to do with the money. The second question then is who the policy makers expect to form businesses if those who have the means, are capable, have management skills and are willing to, are forbidden. The third issue is how policy makers expect those who retire to be able to form businesses when that was a 'taboo' and without savings of more than K2 000. The required average investment even for a small firm was shown to be very high at about K450 000 (see chapter 7). It is therefore evident that the consequences would be serious and negative.

One of these consequences is that the economic base of the country would not increase rapidly because fewer firms would be formed. Those who already have businesses, cannot be expected to do so as diminishing returns would set in. There is a limit to the number of firms a person can personally manage efficiently. This is particularly critical since chapter 7.2.1 revealed that the most common form of business ownership is a private limited company (70%).

The worst part of this policy is that it encourages foreigners (who are unaffected by the code) to own businesses at the expense of Zambians. Chapter 3 showed that the former historically dominated business ownership. Evidence from this study showed that foreigners still own about 53% of all businesses in the manufacturing sector. Yet as table 11.2 indicates, the proportion of foreign employees is about 5%. The effect of the code therefore is to encourage and enable foreigners to exploit the wealth and enrich themselves while Zambians simply watch on.

It would be a fallacy to argue that Zambians are free to leave employment to go into business ownership because evidence from this study (chapter 7) revealed that 63% of businessmen start with their own savings. So they need to work for an average of 12 years, save money, perhaps even start a business while working, then if successful, resign to concentrate on the businesses. It was also shown that business ownership needed full time attention as 82% were not engaged in any salaried job (see chapter 7). Restricting business ownership to retired employees would be retrogressive since by the time they retire at 65, they would not be in a position to effectively run a

business. It has been shown that the average age for starting a business was about 30. It has also been shown that the age of an average businessman at the time of the interview was 42. So almost all business starters do so before the age of 65. To say that they could resign to go into business would be unrealistic since Zambians have not historically been business owners. So they have to try out before resigning.

From the social point of view, the code turns retired workers into destitutes since there is no social security system in Zambia. Refer to chapter 9 for detailed discussion of other consequences. The purpose of a scientific study and "hypothesis testing is not to question the computed value of the sample statistic" (Levin, 1987: 373) but to make an objective judgement or an interpretation about the difference between the sample statistic and a hypothesized population parameter. Research results have clearly indicated that the three groups do not support the leadership code in its present form. The basic principle of controlling the activities of the top leadership is however favourable. This was shown by a divided response to a suggestion of abandoning the code. However, when forbidding of business ownership was considered together with a suggestion to abandon the code, the general consensus was that the code in its present form has no purpose. It should be abandoned. The need for checking the very top leaders was however acknowledged. But suggestions of using other available procedures and legal channels such as the Anti-corruption Commission were suggested. This researcher concurs with these views.

The most critical point to consider in arriving at an objective and amicable solution is for leaders to provide an answer to the question of who the code serves. In the light of overwhelming evidence, accordingly, it is highly recommended that the government seriously considers:

a) dropping the leadership code and allowing anybody who wants to form businesses to do so;
b) banning active participation in the management of a person's own business while still in office;
c) using the Anti-corruption Commission and other available avenues to monitor abuse of power by top leadership, who should include senior office bearers starting with ministers (including managing directors);
d) encouraging and supporting employees in various sectors of the economy to seriously take up business ownership as their career while still in employment, but to resign when they get established. The government can even offer its facilities to talented people to test their ideas or products.

11.5 GOVERNMENT'S FISCAL POLICIES TOWARDS SMALL BUSINESS

11.5.1 THE ROLE OF SMALL MANUFACTURING FIRMS IN EMPLOYMENT CREATION

Research results revealed that contrary to the hypothesis, small firms significantly created more employment in the long term. Their role cannot therefore be questioned (see chapter 7.5.3).

Understanding reasons why people go into business is a key to developing policies aimed at encouraging their multiplication. In the Zambian case, the most prominent reason was found to be independence. Other studies (Golby and Johns, 1971: 8-10) have reported similar findings. Money was the least. This was also true for potential businessmen (SBIS students and graduates). Other studies have reported a combination of independence with a satisfactory level of profit (Storey, 1982: 117). The economic theory emphasises making money and satisfactory profit as the main influencing factor while sociological studies have stressed forced circumstances internal or external to the person (psycho-dynamic model and social development model).

11.5.2 REQUIREMENTS FOR BECOMING AN ENTREPRENEUR IN ZAMBIA

One of the most important findings of this study was that contrary to official government pronouncements, becoming an entrepreneur was an arduous route demanding many attributes. First, there was a need for a high level of education of at least secondary school (84%). This compared unfavourably with the national population of 10% falling in this category. This finding is similar to the case of U.S.A. where business founders

are more educated than the general public and those who found rapidly growing businesses tend to be "vastly more educated" (Dennis, cited in Dale, Nov., 1987: 3). Second, it called for a working experience of an average of 12 years. About 8 out of 10 had first sought a salaried job. Third, it required some form of training as about 6 out of 10 had done so. This evidence would tend to support the psycho-dynamic model of entrepreneurship theory. This was an interesting finding, which was in sharp contrast with the trait theory. Fourth, evidence showed that only 32% of businesses were formed by first born children. Fifth, there was no relationship between business ownership tendencies and parental background. In 80% of the cases, the entrepreneurs main jobs before owning a business were not in the same industry as their fathers (see chapter 7.3.1.5). In 60% of the cases, their father's highest education was primary level while this was 76% for mothers. As regards business ownership by their parents, this was 30% only among indigenous Zambians. Most of these businesses were retail establishments. These findings were however not surprising since Zambians have no history of business ownership or inheritance as seen in chapter 3.

In addition to personal attributes situational factors were important. The first of these was the need for raising finance from own savings (63%). The average start up capital even for small businessmen was quite high at about K400,000, with a median of K75,000. Businessmen indicated that availability of start up capital was essential.

Second, in most cases operational capital was provided by entrepreneurs themselves. In fact 50% had not even attempted to

apply (knowing they would not qualify) although only 23% had enough capital. These constraints relating to start up and operational capital and the need for small businessmen to provide for themselves were confirmed by financial institutions it will be recalled from chapter 10. These do not normally provide start up capital because it is not one of their functions. Their conditions for giving operational capital are also so high that many small businessmen do not qualify. Third, most entrepreneurs have to go through the cumbersome process of starting a business from the scratch (80%).

A fourth important environmental factor worth mentioning was the finding that entrepreneurs did not necessarily start businesses in the same industry they worked in for most of their time as only 34% did so. This was in contrast with experiences in the U.K. where "80% (91 out of 152) new firm founders remained in the same industrial order" (59% having remained in manufacturing) (Storey, 1982: 113). Other studies found similar results of at least 50% remaining in the same sector (Johnson & Cathcart 1979(a)), but Cross (1981) found 40%. The implication for small business policy makers is that many opportunities exist for business start ups making it easy for potential entrepreneurs to change fields.

The fundamental implication of all these requirements is that creating a formal viable business, be it small or large by a grade VII dropout is certainly extremely difficult. Recall that in this study only 15% had a primary level and below. this therefore means that the government cannot pin its hopes on this group.

These findings would however tend to support the social Development model. This has two implications for the government. These are that it is possible to increase the supply of entrepreneurs in two ways. First, by developing individuals with potential thereby removing personal constraints. Second, by removing unfavourable environmental factors such as financial constraints. Some of these may need positive discrimination in favour of small businesses.

11.5.3 THE NEED FOR A SMALL BUSINESS SUPPORT NETWORK

In order to develop the individual and remove environmental factors the government cannot achieve these by itself. A network comprising of four sectors namely educational institutions, professions, businesses and government would be needed. This has been the case in the U.S.A. where it has proved successful (Dale, 1987: 2). Refer to chapter 2 appendix 2A.6.1 for a discussion of the various small business sector audiences. SIDO should play a practical central role in co-ordinating the functions of the various units of the network. One key institution in the professional sector, which is critical to the success of the small scale policy is the financial sub-sector.

11.5.3.1 THE NEED FOR SMALL SCALE FINANCING INSTITUTION

Small businessmen in Zambia need and want financial assistance unlike their counterparts in the U.K. There they were opposed to any direct assistance or advice from the government or other sources due to fear of likely government restrictions or strings (Golby & Johns, 1971: 4). Others claim of the "impossibility of any one telling me how to run my business".

Those in the U.S.A. were opposed to training. It will be recalled that SIDO is well known, at least 95% have heard of it and 78% know it and close to half can tell its functions. It will also be recalled that a government policy of "no assistance at all" to any firm was viewed as "unwise and counterproductive" by 9 out of 10 businessmen. The government was viewed as the father of the nation to provide for economic development. Recall also that 50% of businessmen stated that assisting small businessmen was a good policy. But 86% of them rejected a policy of assisting established firms only. The implications are that small businessmen need start up capital. Adequate finance for equity long term loan holds the key for the success of the small scale policy in Zambia. But private financial institutions can not be relied upon to spearhead this developmental role. The government has to assume this responsibility. It will be recalled that financial institutions disclaimed responsibility arguing that their loyalty was to the depositors of money as they were only custodians. This uncompromising attitude should not be expected to change.

The government should therefore seriously consider establishing a specialised Small Business Development Bank for financing small businesses. The shareholders should comprise the government, BOZ, Commercial banks SIDO, and other private organisations. Limits on nominal capital, maximum loan disbursements, maximum amount such a bank could borrow from the share-holding organisations can be set. Included should be prohibiting financing of initial stages of research and development.

The Development Bank of Zambia (DBZ) should not be relied upon to combine the roles of financing all sorts of developments including that of small business. The small firm sector is bound to suffer. If financial constraints do not permit, the objective can still be achieved if a separate autonomous unit, with the General Manager reporting directly to the Bank's Chief Executive.

The guarantee scheme provided by the BOZ has been a sound development. But should not be relied upon in isolation of this proposal. The basic reason is simple. Banks have categorically stated that the position will not change since their lending criteria would remain rigid. This was particularly so in the light of the stringent conditions imposed by BOZ (see chapter 4.7.2.2.2 and chapter 10). It therefore appears that there would be no compelling reason for a bank to risk losing about 70% when it can safely lend the same amount given to several small firms to one big customer. The guarantee scheme will therefore be another enactment that will simply remain on paper.

The most appropriate organisation to be responsible for financing small firms would have been SIDO to reduce red tape in the processing of loans. But past experience in Zambia and evidence from this study point to the immature and irresponsible attitudes of Zambians towards government agencies' assistance. Aid is unfortunately still viewed as gifts of the pre-independence political promises. SIDO would therefore collapse if it was given this responsibility. There is also a need for a counter balancing promoting businesses, financing and collecting credits. It is however not impossible to do it, the SBA in the U.S.A. has managed to combine the two roles. The fact "that you cannot prevent a fool from his folly is no reason why you

cannot give a prudent man guidance" (MacMillan Committee, 1931: 186).

In this regard, it is suggested that SIDO be given the responsibility for administration of loans for small projects. This will make it be perceived as an effective organisation instead of completely depending on other institutions as is the case at present. SIDO should be central and involved and should be seen to be so by businessmen in project evaluation and finance processing for it to retain respectability.

These proposals are not far fetched from experiences of other countries such as Japan, U.K. and the U.S.A. which faced difficulties in financing of small businesses. These led to the need for the formation of specialised financial institutions or agencies. Assuming this developmental role by specialised agencies was a result of realisation of two important aspects. First, the recognition that (MacMillan Committee, 1931: 184):

> in any community which wishes to keep in the vain of progress the financial and industrial worlds should be closely integrated through appropriate organisations

Second, acknowledgement that small firms (Radcliffe Committee, 1959: 323) "cannot offer altogether adequate security for the loan capital that it wants" and has therefore limited opportunities of raising long term capital because of the "rigorous standards of credit worthiness". But banks have also long recognised "that small concerns stand in special need of their support and help them to the best of their ability" (p.325). Another related problem is that the small businessman (or his advisors) is not often aware of available financing facilities. The small businessman may also hesitate, as this

study also revealed, "approaching unfamiliar institutions for assistance" Radicliffe Committee, 1958: 324).

As a result, special small business financing institutions have been found to close this gap. In the case of U.K., following the MacMillan Committee recommendations, The Industrial and Commercial Finance Corporation was formed by the Bank of England, the London clearing banks and Scottish clearing banks to provide credit for industrial and commercial businesses or enterprises (p.328). In the U.S.A., the SBA is charged with the role of providing finance. It was seen earlier in chapter 4.5.1 and 4.5.2.3 that in the case of India and Japan, in addition to commercial banks and private small business specialised financial institutions, government sponsored institutions with networks of many offices throughout these nations exist.

11.5.3.2 NEED FOR ADEQUATE FUNDING FOR SIDO

Without adequate funding to enable it implement its programmes, SIDO will become a white elephant, in spite of its blue print of support it can provide. It has made great strides to make itself known by potential businessmen. But there is hardly anything SIDO can do without finance. Results have shown that SIDO's assistance has been almost nil. SEP has even performed better despite that the former is a national organisation.

11.5.3.3 THE NEED FOR LOCAL AUTHORITIES TO GET INVOLVED

The proposed network should include local councils since they are basically responsible for developing their areas. the results revealed that with the exception of Mdola District

Council, the rest had no small business policy. But the majority indicated that they would be willing to assist if they were approached.

In other countries such as the U.K., local councils are heavily involved. In 1987, at least 3/4 (out of 208) local authorities "operated a scheme or schemes whose specific purpose was to stimulate economic activity in the local area...The majority of these schemes were targeted at small and new business..." This was a result of a deliberate policy by the government in the 1970s to extend their role to include "the overall economic, cultural and physical well-being of the community" (Barness & Campbell, Nov., 1987: 2). The services they provide include:

a) financial assistance (capital grants, soft loans or employment subsidies);
b) physical infrastructure (factories, small workshops and premises);
c) advice and training on marketing, sales, finance, product development, directly or by referring them to an appropriate agency.

The main aim in all these is to provide employment. Some councils are now even able to provide financial assistance through established separate semi-autonomous enterprise boards or companies, sometimes headed by specialist managing directors from the private sector. This is done to avoid bureaucratic delays of local councils which are managed on committee basis. Yorkshire Enterprises Ltd. in England has for example proved successful (Barness & Campbell, Nov., 1987: 6).

11.5.3.4 RECOMMENDATIONS TO THE GOVERNMENT AND SMALL BUSINESS SUPPORTING INSTITUTIONS

Since small firms have been shown to create more jobs than large firms over a long period of ten years, significant at 0.04, there is a case for the government to seriously think of making adequate investment in this sector. In the past the large parastatal companies have continuously been receiving government investment at public expense. By adopting the Social Development model, the government can encourage the creation of more entrepreneurs. It is therefore recommended

(a) To the Government

1. the government through SIDO establishes a support network. The private sector should be encouraged to be involved in small business promotion programmes. They do so in countries such as Britain;
2. the government establishes a separate small business financing organisation, shareholders to be held by BOZ, Commercial banks, SIDO and the Private sector. Alternatively DBZ should be strengthened by creating an autonomous unit responsible to SBZ's chief executive.
3. banks be required to provide a certain proportion of their lending portfolio to small businesses, say 20%. They will not do this on their own;
4. BOZ guarantee scheme be made more flexible and effective by guaranteeing not 70% but the whole amount advanced by banks to small businessmen;
5. banks be permitted to expense a certain proportion of bad debits for loans advanced to small firms

6. provision of allowable bad debit say up to 4% and tax credit of up to 4% to financial institution who advances loans to new small businesses if these total loans accounted for more than say 12% of the total loans of the institution;

7. the government underwrites about 15% of interest rate banks charge to small business, as a way of underwriting development. A small proportion as banks stated would not make any major impact;

8. in addition to income tax incentive already provided, the government exempts small firms from sales tax and other direct taxes such as property tax entering their cost, which may have more fundamental impact than the present income tax;

9. the government extends and implements the policy of reserving small contracts, applicable to the construction industry, to the manufacturing sector by reserving about 25% of all government purchases for small firms in various sectors. In addition, the government sets aside 10% of all purchases for newly created businesses;

10. contradictory laws relating to small firms such as the Factories Act, Town and Country Planning Act, Trades Licensing Act, the need for a manufacturer's licence under the Investment Act. some councils indicated willingness to change some of the legal requirements for example relating to requirements of meeting specific standards for factories for certain types of manufacturing firms. All of them said they in fact tolerate these now. The businessman should not be tolerated, he should have a legal right;

11. government should seriously think of establishing an informational base. This should provide required data on births and deaths of firms, essential in evaluating the performance of small businesses;

12. computerise or provide a better informational, storage and retrieving system at the Ministry of Commerce and Industry. The present one is chaotic to say the least;

b) District Councils

13. provision of serviced plots and estates to small businesses at special concessions be made. It is in the interest of councils to develop their areas and provide employment. The government can assist in providing development funds for example for plots and estates;

c) SIDO

14. SIDO be adequately funded with working and developmental capital for it to be able to effectively provide the expected essential services;

15. SIDO be enabled to directly finance projects within certain limits, say up to K50,000. Its present role of recommending potential entrepreneurs to other institutions renders it a toothless bull dog. Businessmen stated that finance was the critical issue. One who does this (as SIDO Director also said) is viewed as the most effective;

16. SIDO accepts the definition developed in this study and recommends it for enactment. It is easy to use but stands the test of time compared to the present one based on capital. A small business should simply be defined as:

A commercial organisation that is managed by at most three managers, or having not more than 50 work-force including owners, family members or part-timers in all establishments falling within an enterprise.

d) Businessmen

17 businessmen and all Zambians be assisted by the government to change their welfare type of attitudes towards government assistance programmes.

11.6 CONCLUSIONS

This study has shown that the small manufacturing sector has an important role to play in the Zambian economy. It creates more statistically significant employment than the large manufacturing sector in the long term.

Enterprise formation in the Zambian environment takes place in different situations. But persons with primary level of education have very little chance of forming a business as the process in complex and demanding.

Provision of education training to promising university graduates through various programmes such as small business courses and Graduate Enterprise would encourage and prepare graduates to take up entrepreneurship for their career.

The government has to take a stronger direct role in spearheading small enterprise formation as financial institutions and local authorities are either unwilling due to the nature of their businesses or are incapable. But local authorities can play a very effective role due to their conducive locational advantages if the government can support them or encourage them to do so.

The government has to provide a conducive atmosphere for the creation of small businesses. This includes abandoning the leadership code, making its position clear as regards the size limit of firms individuals can freely establish without risking being taken over. The government should also provide more incentives.

11.7 AREAS FOR FURTHER STUDY

At the end of the research project, this researcher was convinced that no matter how comprehensive and integrative a research is such as this one there are always certain areas where the study raises issues which remain unresolved. Some of the areas which may be pursued are:

1) effects of university's research and consultancy policies;

2) views of employers on the quality of the BAc degree;

3) views of the members of the Zambia Institute of Certified Accountants on the suitability of the BAc degree in industry;

4) provision of university accounting education and training in Zambia;

5) progression of SBIS graduates in industry;

6) predispositions to business ownership by graduates of other institutions of learning;

7) an estimate of the number of small businesses in the manufacturing and other sectors;

8) problems and needs of small businessmen;

9) target group among other potential businessmen on whom promotional efforts can be focused. In other words what are the factors for the successful ones;

10) relationship between success and educational levels among businessmen;

11) financial performance of small businesses;
12) adequacy of present incentives for small firms;
13) sizes of small businesses which produce more employment;
14) births and deaths of small businesses;
15) information system in Zambia.

SMALL SCALE BUSINESSES IN ZAMBIA: THEIR ROLE IN EMPLOYMENT CREATION

BY

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A DISSERTATION

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CHAPTER 1 TECHNICAL APPENDIX 1 (1A1) -THE CONCEPT OF THE SMALL FIRM : DEVELOPING A SMALL BUSINESS DEFINITION

1A1.1 INTRODUCTION

The aim of this technical appendix is to present a theoretical analysis of the meaning of a small scale business. There were three persuading reasons for treating small firm definition at length. The first was to derive a suitable definition for use in this study since present definitions were found inappropriate. This therefore required justification for such an action. Second was the need to recommend adopting a better definition for use in Zambia. This needed theoretical and empirical support to convince potential users. Third, achieving the first two objectives therefore called for deriving theoretical framework for empirical testing of the concept of small business.

Appendix 1A1 surveys the historical and present scientific definitions. The usage of the term in a selected number of countries is then discussed. The appendix concludes by looking at the Zambian definition of small scale business. Chapter 1 appendix 2 (1A2) analyses the problems of small firm definition and their unsuitability for adopting in this study. A suitable approach is presented. But empirical testing of the definition is appropriately completed in chapter 7 after data collection.

The term small business, though commonly used almost every where today mean different things to different people. It is this diversity among small business definitions that necessitates

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its definition at this stage in the research because as Hertz (1982: 4), has correctly pointed out

> a phenomenon without an exclusive definition is a non-existent phenomenon, not just from the judicial aspect, but also from the factual one.

Defining a small firm would therefore allow its identification as a unique occurrence dissimilar to others. It is this differentiation that allows special treatment of small firms. Definition is especially important to those seeking to build upon an understanding of a phenomenon through empirical study.

An adequate and clear definition of what constitutes a small firm is essential for this study in order to have the common background required for understanding three vital factors:

1) the meaning of small business phenomenon;
2) the role expected of small firms in contributing to Zambia's economic development resulting from the creation of SIDO;and
3) the intended usage for this research.

The approach to the definition of small business begins with brief explanation of what is meant by 'scale' in the terminology 'small-scale'. This is followed by a presentation of methods of classification and general criteria for developing a definition. The dilemma of a universal definition of small business is then discussed from the scientific point of view on one hand and legalistic, juristic and administrative practices in a selected number of developed countries and Zambia on the other hand. The purpose is to reveal the deficiencies that exist in the present definitions. Reservations associated with qualitative and quantitative criteria are then raised by this researcher. Finally, objectives and criteria which are indispensable for developing the definition for this research are set.

1A1.2. MEANING OF SCALE

Any discussion of small business is related to size or scale. This in turn starts from the technical factors of 'economies of large scale', which are the primary factors influencing the relative fortunes of firms of various sizes. In addition, market factors such as imperfect competition on one hand and oligopoly on the other; and the cost of borrowing influence the size of a firm.

This discussion, is concerned with the 'internal' economies and market factors. Internal economies depend on the size of the firm while external economies depend on the size of a group of firms. The former are reductions in costs per unit of output which arise due to increases in the scale of production of a unit. This unit may be a plant for economies of scale in production costs or a firm in the case of economies in purchase of materials (Steindl, 1945: 1 & 13).

Classical theorists such as Adam Smith (Steindl, 1945: 14) attribute the rise of large-scale economies to the need of division of labour, which creates specialized units (persons, machines or tools) which must be used to capacity to be fully effective. Steindl has observed that most of the subsequent explanations have not gone beyond this. Professor Sargant Florence had tried to throw more light by relating the concept to the principles of 'bulk transactions', 'massed reserves' and 'multiples'. The first deals with buying in large quantities, the second with reserving against unforeseen contingencies which increases effectiveness (or reduces likely costs). The third

refers to using various specialists and specialized machines in one and the same machine in appropriate combinations which may result in optimum capacities of production.

A small scale business organisation is therefore a subset of the concept of business. But it suffers from various disadvantages which constrains its growth capacity. These would include imperfect market competition and oligopoly as well as prohibitative costs of borrowing long term capital (refer to chapter 4.8). Small scale, in a sense, therefore exists when large scale economies are absent.

1A1.3. CLASSIFICATIONS OF METHODS AND CRITERIA FOR SMALL BUSINESS DEFINITIONS.

1A1.3.1. CLASSIFICATIONS OF DEFINITIONS

Small firm definitions can be grouped into two broad categories: applied and scientific. Hertz (1982: 25-34), one of the few known researchers to treat this area in great depth, has suggested that a small firm can be classified in four ways. These are, beginning with the most prominent based on territorial a) influence, b) legal, c) juristic, d administrative and e) scientific definitions. The first three make up the applied category. (Throughout the presentation, the discussion, will interchangibly refer to small firm, small business, small scale-business, small organistion, or small enterprise as being the same, unless otherwise specified.)

1. **Legal Definition**

This is an accepted exclusive juridistic definition that has been formulated by a legislative process, empowered to designate the same meaning to all identical small business in any legislation to which they are referred to in a direct or indirect manner in a sovereign State, at a certain point in time.

2. **Juristic Definition**

This is one which has been brought about through a legislative process by a specific legal rule or regulation, intended for the specific interpretation of that rule or regulation, but is not applicable to the entire legal code nor to all identical small businesses but only those which come under its juridiction. The difference between legal and juristic is that the former applies to all businesses in a country in all regulations referred to while the later is limited to a particular category in one piece of legislation.

3. **Administrative definition**

This is set by an authorised member or chief executive of an administration regarding a particular target small business population as authorised by either a legislator, usually restricted to the quantitative criterion. It is not intended for ascertaining eligibility for inclusion or exclusion of certain duties, benefits or incentives, but is usually a temporary expedient measure when legal or juristic definition is delayed. It is meant for administrative purposes only or inter-departmental work distribution. As a result no recourse is available to the small businessman against the exclusion or inclusion.

4. Scientific Definition

It is one that is undertaken by one individual without consulting the target small businessmen who are being defined and is unenforceable if it is disagreed with since it has no legal or administrative backing (Hertz, 1982:37-53). The basic purpose is to evolve theoretical knowledge and understanding, and dissemination of these to a wider audience. Almost all definitions by academic researchers including this researcher would fall in this last category. Although developed by an individual these type of definitions may have important influence on the development of the other types of definitions. The precise differences among the four types of definitions should be noted from the outset because reference constantly reference will be made to them through out the rest of this appendix.

1A1.3.2. METHODS OF SMALL BUSINESS DEFINITIONS

Any of the four classifications presented in the previous section can use positive, negative or exclusive methods based upon either either qualitative or quantitative criteria (Hertz,1982: 37-53). Positive definition refers to when a small firm is defined

> "in a direct manner aimed at accounting for its singular characteristics, irrespective of its relation to other"

businesses in order to determine what it is. Negative definition refers to what a small business in not. This may be useful when many unidentical small businesses, but possessing certain common denominators, need to be included in the definition. Exclusive definition is used (Hertz, 1982: 37-38) by a legislator to identify small businesses

whose quantitative norms of identical qualitative characteristics do not conform to those of the majority

This can for example refer to small businesses with less than such amount of revenue being exempted from meeting employee safety standards. Exclusive definition may take three forms: a) exemption, b) exclusion and c) tiering. Exemption means being excused from carrying out all or part of the duties (as in the previous example). Exclusion refers to not being allowed to receive certain benefits. Tiering means allocation of an independent set of duties and/or privileges to more than one category of small businesses defined from the onset.

1A1.3.3. TYPES OF CRITERIA OF SMALL BUSINESS DEFINITION

The purpose of a small firm definition is to have a common understanding of the same phenomenon. This is accomplished by using qualitative or quantitative criteria or both. Any of the four classifications and any of the three methods of defining a small firm can use them. Qualitative criteria are those standards which are difficult to measure but can only be described as precisely as practicable. Quantitative criteria refer to explicit and technically measurable standards regarding business activities or functions used for determining qualification of a business firm into a small business category. Hertz (1982:40-41) has defined, on one hand, qualitative criteria as those that provide descriptive characteristics, functions, and/or the attributes which are possessed by or lacked by the small businesses regardless of its quantitative determinants. It is argued that all criteria start as qualitative ones but can in principle be quantified, given the right tools. Quantitative criteria, on the other hand, refer to those qualitative criteria

which can be numerically quantified in a reasonable practical manner.

1A1.4. THE DILEMMA OF A UNIVERSAL DEFINITION OF SMALL BUSINESS

In practice the problem in arriving at the same understanding lies on how the criteria are determined, interpreted and implemented. That is whether they are set on the same level, giving the same meaning to all the parties concerned and in all countries, as for example in the word 'elephant'.

To a layman, the term, 'small business' is used so often that there is a tendency to think that there is a uniformly accepted definition. As of now, there is no uniform, universally accepted definition of how small a business should be to qualify to this sector.

The predicament arises because of conceptual problems in applying a universal formula for all purposes, the inherent practical problems of lack of data required to test ideas, and influence of existing traditionally data collections procedure. Curran (1978: 5) attributes this to two further difficulties: inherent problems in small firm discussions and different aims of writers.

The interpretation of what a small firm means varies from country to country depending upon the economic system followed, the level of economic development, the types of existing market structures and ultimately the criteria used in a particular country (Kamya and Sbenkele, June, 1982: 189). Hertz (1982: 3 &

425) has however argued that the basic determining factor is the country's economic system. She has stated that, although the size of a large firm correlates to the size of the economy, since size allows their expansion, this is not true in the case of small firms. In the latter, size depends on the economic philosophy or economic principles followed by the regime of that country. In other words, a small firm in a large economy would not necessarily be a larger one than a small firm in a small economy. This view is however not correct. The level of a country's economic development is also very important. If, for example, a small firm employing 500 or even 1000 people, such as an oil refinery, which would be described as a small firm in the U.S.A., was transrooted to Zambia, where most firms are small (here using capital or employees), that firm would not be a small one. It would require a huge investment and government participation which has the needed resources. But according to Hertz's view, such a situation would arise because of possible differences in the economic philosophies followed in these two countries. Hertz made an attempt to support her view through comparison of small firms, found to range from larger to smaller as an economic system varied from the most capitalistic of the U.S. through the medium of U.K., the more left oriented of Israel to the most socialistic of China. In China, the size of the economy was large but it was found to have had no influence on the size of small firms.

The discrepancies in definitions used across the world are astonishing. In a study conducted by Auciello, Johnson and Hagenveld (1975: 3-53), this researcher established that at least 50 different definitions are used in 72 countries (not 75 as

reported by Hertz) included in their study. Even in this case, the definitions were only similar in using the criteria as there were no two countries which had an identical definition. These countries represented all the global areas which are industrial countries of U.S.A., Canada, Japan, United Kingdom; industrial Europe; Caribbean and Latin America; Middle East, East and South-east Asia; Africa and Oceanic. Hertz (1982: 19) also refers to two studies carried out by the European Economic Community. In one report, if was concluded

> that there was lack of agreement as to what constituted a small business and that a legal, economic or statistical definition did not exist.

In the other report, it was noted

> that no official definitions of small and medium-sized enterprises, or of the artisanat existed.

Apart from variation from country to country, the specification of what a small firm is may sometimes differ from one industry to another within the same country. Phillips (1951: 36-37) reported:

> different criteria of smallness are applied to different divisions of the (US) economy and sometimes different criteria are used in a single major division of the economy

Through simple statistical manipulation of the reported list of definitions, by Auciello, Johnson and Hagenveld this researcher found that 75% or 54 countries used more than one measure in their definitions. Only 25% (18 out of 72) used a single measure. In addition to using more than one measure in one industry, diverse stipulations are devised for assistance eligibility to government programmes by small enterprises within the same industry. Furthermore, Hertz (1982: 198) has stated that

in the case of the U.S.A., it also varies not only within the same industry but also in the same sub-industrial division, according to its geographical location.

Defining a small firm for purposed of this research study was not, an easy task. The existing literature is not very helpful as it is ambiguous, contradictory or simply evasive despite of apparent existence of a pool of small business definition approaches.

It is in this respect a truism that the "search for a definition of small firm is far from over" even within the same country and the same industry up to now (Ganguly, 1985: 5). Ironically, this is valid even in countries such as Britain and surprisingly the U.S.A., which defined the small firm through the 1953 Act (32 years ago) as will be shown later in this appendix.

Before developing working definition for a small firm, it was determined important to demonstrate the discrepancies in small business definition. This was accomplished through illustrations of the approaches followed by social scientists and the practical methods applied in a selected number of developed countries and Zambia. The aim was to show the practical problems of defining a small firm, applying the definition in a particular environment and subsequently making a universal comparison of its meaning. The reasons for the variation could be due to the existence of a majority of definitions intended for jurisdictional or administrative purposes not scientific. Refer for example to the case of 75 countries discussed above and compare them to the number of social scientists examined in the next section.

1A1.4.1. VARIATIONS IN THE MECHANICS OF (QUALITATIVE) DEFINITIONS IN THE SOCIAL SCIENCES.

The present thinking on small firms by social scientists has been greatly influenced by their predecessors. Nevertheless, the later comprising economic theorists and social psychologists did not proffer a unanimous understanding of a small firm.

Despite unanimity, evidence indicated that the importance and influence of scientific definitions in research fields as well as its indirect impact in juristic and administrative definitions is widely accepted. The Bolton Committee of Britain, appointed to look into the role of small firms in the national economy, the facilities available and problems confronting them, for example relied (albeit scanty), on previous research as a guideline for its approach (see also Hertz, 1982: 123). The Committee (1971: 1 & 374) relied heavily on eighteen internal and external scientific research studies it commissioned. In turn, in one of the most influential reports to the Bolton Committee (on the manufacturing sector), Davies and Kelly (1972: 1) stated:

> it was not possible to undertake much original research and the report relies heavily on work already published.

Researchers such as Boswell (1973), Curran (1978) and Stewart (1978), to mention but a few, have all referred to the works of economic theorists such as Schumpeter, Drucker who are regarded as the fathers of management (Hicks, 1983). The field of small business was not however referred to in direct terms by these early scientific researchers, but by using such words as

> entrepreneur, the founder, the risk-taker, the private owner, the family enterprise or simply as the capitalist.

The lack of interest in the small business and its owner/manager in either the socialist or the capitalist camps has been attributed to (Hertz, 1982: 123).

> the heterogeneousness, unpredictability and non-conformity with economic models

1A1.4.1.1 SCIENTIFIC CLASSIFICATIONS OF SMALL BUSINESS DEFINITIONS BY EARLY ECONOMIC THEORISTS

Scientific researchers defined small businesses in terms of private ownership, an accepted integral part of the small business concept at least in the capitalist states. Private ownership refers to specific identification of the whole or part of the property or its financial worth with a certain person or persons (Hertz, 1982: 123). For lack of space only one definition will be referred to.

1A1.4.1.1.1. Schumacher's Definition of small business

Schumacher, like Schumpeter, was one of the early economic theorists. But the former is considered to be the first economic theorist to devote a direct and exclusive treatment of a small firm as a separate identifiable and unique institution in his book 'Small is Beautiful' (Hertz, 1982: 126). Identifying Schumacher's definition requires piecing together ideas relating to small size. To begin with, Curran (1978:3), observed that Schumacher

> advocated changing large-scale firms into 'quasi-firms' i.e. a collection of semi-autonomous units whenever it was desirable to retain some of the advantages of large size as he concluded that small firm was the ideal type.

Hertz (1982: 126) however argued that contrary to misinterpretations of Schumacher's work, (such as Curran's), that he had advocated small businesses, and private ownership, entrepreneurship and capital to the exclusion of large firms, his concern was in promoting workers' interests and needs. Workers should not be directed at serving the organisation's needs and interests alone (McGregor, 1973: 748), but also their needs (Curran, 1978: 3). Schumacher (1973: 225) stated that the worker should not be viewed and made to feel that he is

> nothing more than a small cog in a vast machine and when human relationships of his daily working life becomes increasingly dehumanised.

Viewing workers in this manner common in large organisations sees property as 'capital' or an alternative to creative work. Schumacher regarded this alternative as

> unnatural and unhealthy (since the) passive owner... lives parasitically on the work of others.

Contrary to this, in small firms, private property is viewed as an aid to creative work since the owner is a (Schumacher, 1974: 220) "working proprietor...(which is) natural and healthy" In order to satisfy this later condition and avoid exploitation, Schumacher's conclusion, (which led to being misunderstood) was that the private enterprise should necessarily be "small-scale, personal and local".

Schumacher did not envision growth, success and high profit of such a small business. The reason was that this would threaten the very basis of proprietorship requiring employing salaried managers. If this happened, (Schumacher, 1974: 221):

> This would lead to expoitation if he appropriates profit in excess of a fair salary to himself and a return on his capital borrowed from outside sources

Although Schumacher did not explicitly define what he viewed as a small organisation, six elements can be identified and put together for a definition. In today's terminology a small business would therefore qualitatively be defined as small business as (elements in italics) one where there is *ownership of private property* needed for *creative work*, *conducted / managed* by the *proprietor himself* in a *personal* manner in a *local* area.

Note that three factors (stagnation, failure, and profit minimization) have deliberately been left out the reason is that such a view would be inappropriate for both capitalist and mixed economies since it negates the very basis of private enterprise. Hertz (1982: 131) adds that such an entrepreneur would be viewed as a content craftsman-cum-trader without any initiative to seek innovations, product or market opportunities or inspire others or according to Stanworth and Curran (1973) financial aspirations.

1A1.4.1.2. SCIENTIFIC CLASSIFICATIONS OF SMALL BUSINESS DEFINITIONS BY EARLY SOCIAL PSYCHOLOGISTS

Sociologists, industrial psychologists and behaviourists have proffered social and psychological criteria (Hertz, 1982: 145). This interpretation of small firm is based on the unity of interests between the owner/manager and the business. It has been accepted by some researchers such as Davies and Kelly (1972: 47). Herts has for instance construed Davies and Kelly's reference to Kaplan as agreeing with him. They hailed Kaplan's definition of

> means small business [which]means typically, an identity of management and ownership ... [as] a rather more comprehensive definition.

It is true that most definitions derived from the field of social psychology emphasize managerial characteristics. Although many of these are approved by these social scientists, ironically, they do not lead to similar definitions due to different weights applied upon them or even disagreements as to whether they exist after all. As a result of different interpretations, two broad types of definitions have emerged. The first relates to 'entrepreneurial type' stressing the characteristics or attributes of the small businessman himself. The second refers to 'personal management' which puts more weight on the manner of management style practised by the small businessman.

Some definitions border on the two approaches rendering it difficult to categorise them in one group or the other. First the hybrid - type (the entrepreneurial and management style combination) will briefly be looked into by making some observations and drawing some conclusions. Then the two pure types will be analysed.

1A1.4.1.2.1. **Hybrid Type of Definitions**

Hollander's definition focuses on the centralisation and concentration of managerial tasks into the owner/manager. Small businesses are viewed as ordinary types of business organisations since they carry out all or most of the business functions and decision making regarding the product, the market place, financial requirements as well as management. But they do (Hollander, 1967: 4-5; Hertz, 1982: 146).

> not exceed a size which considering the nature of the business, permits personalized management in the hands of one or a few executives as opposed to the institutionalized management characteristics of larger enterprises --- [they are] self initiated, largely self financed and self managed.

Kaplan underscores the centralised control by the owner. But he goes further by identifying (Kaplan, 1948:17)

> a personal relationship between owners and employees and customers, the affiliation of the firm with a local community, and dependence for its market on the local area all of which when present in combination, enable the small business to be identified ...

He defines a small business as one where there is no differentiation between management and ownership, and is also characterised by lack of specialized staff to carry out separate functions and facilities.

Kets de vries has not only identified personal management style which exhibits in small firms, but has proffered detailed account of what it means and how it is practised. Simultaneously, he critically enumerated its poor manifestations (Kets de Vries, Feb. 1977:35):

> enterprise is run in a very autocratic, direct way whereby all the decision making processes centre around the entrepreneur. This entrepreneur refuses to delegate, is impulsive, lacks interest in conscious analytical forms of planning, and engages regularly in bold productive moves...

1A1.4.1.2.2 **Entrepreneurial Types**

A more vivid manner of distinguishing between small and large types of businesses, which has been used by social psychologists, has been the classification between the small businessmen's characteristics and personal management. This section is concerned with the former while the latter is dealt with in the next section.

Contrary to Kets de Vries' views, Hertz (1982:148 & 149) reports Smith's study which found two types of an entrepreneur - the craftsman and opportunistic both existing in a small firm. The former is typical of the one described by Kets de Vries and usually associated to small firm. The owner '*inter alia*' has limited and narrow educational and training background, low social awareness and involvement. He is inflexible and lacks confidence, with non forward but present and backward orientation. He is unable to delegate work or authority having a tendency to limit hiring to familiar people. He is often apprehensive of using external sources of finance. The opportunist was found to have a broad education and training, high social awareness and involvement, flexibility, confidence, future orientation, willing to delegate, universal hiring practices and his company grew. Smith's contention was that both types are found in small businesses. It is therefore a fallacy to construe that only the craftsman type exists in small firms.

An extreme favourable, reputable and optimistic view of the small businessman was taken, by Colins, Moore and Unwalla, in their book entitled 'The Enterprising man'. They distinguished between two types of entrepreneurs. These are bureaucratic and innovative entrepreneurs. They argue that the former ordinarily climbs a hierarchical ladder within an already well-established structure of a business enterprise. The latter refers to a man who starts a business enterprise.

He is seen as an heroic figure because he is a typical innovator, traditionally regarded as (Colins et al, 1964: 4-20):

> a risk-taker, braving uncertainty, striking out his own, and through native wit, devotion to duty, and singleness of purpose, somehow creates business and industrial activity where none existed before.

Colins et al., view the entrepreneur of the heroic types as truly the successful common man, but he simply (Colins, et al 1964: 6):

> forges ahead toward the glowing light called 'success' using only native wit, ability and hard work - with perhaps a bit of luck

He is ambitions but simple, disciplined, and committed to achieving the goals he sets for himself. It is important to note that the heroic type of entrepreneur is typically associated with a small firm while the bureaucratic type would be found in a large firm.

1A1.4.1.2.3 Personal Management

Although 'personal management' has been assumed to exist in small businesses, Hertz (1982: 149-151) analyses available evidence and concludes that many different factors determine

> Which type of businesses and at what size and stage of its development, relies on personal management.

Some of these include personality of the owner/manager (as seen in the previous section), the age of the enterprise (Davies & Kelly, 1972), the size of the enterprise, the physical size of the plant and the type of industry and technology employed.

1A1.4.1.2.4. Management Structure

Management structure especially the structure of top management was described by Drucker (1982: 202) as '<u>the only criterion of size</u>' [emphasis and single quotations mine] of a business firm. He stated:

> A company is as large as the management structure it requires.

It will be shown later that this qualitative criterion has been used by some countries in their definitions of small businesses in the sense of personalised management as opposed to structured management. The former refers to a small firm and the later to a large firm. In developing the definition for this study the size of management or structure was the corner-stone in arriving at a definition.

1A1.4.1.3. DEFINITIONS BY PRESENT SOCIAL SCIENCE RESEARCHERS

It should be stressed from the outset, that confusion and lack of consistency in small business definitions is also prevalent to present scientific researchers in different countries.

In Britain, since the publication of the Bolton Report, there has been a tendency for an agreement on small business definitions. Several criteria have been suggested by academic researchers. These include number of employees and total sales. Others are type of management and ownership. Still others are based on its position in its respective industry. Still more others are based on the combination of early scientific thinking, and political (administrative, juristic or legal) using both qualitative and quantitative criteria, These include small share of the market, management by owner, legal independence, single product production and locally operated for qualitative. The quantitative criteria include employees, turnover, sales, profit, total assets and management structure (Storey, 1982: 7; Ganguly, 1985: 20; Curran, 1978: 4-6; Swan, 1971: 2).

In spite of discussing quantitative and qualitative definitions, in general, most studies ultimately use quantitative criteria only for statistical research purposes. Curran (1978:6), for example, reported a limit of 500 employees used in a textbook sponsored by the Institute of Personnel Management. Ingham (1970: 65) and Batstone (1969) used a definition of less than 100 employees while Swan (1971: 2-3) used 500 in his study.

In the U.S.A., academic researchers, for example Nash (1960 :10), suggest the use of similar criteria as those mentioned above such as number of employees, total sales; management and ownership and position in industry. Important research undertakings done for the SBA by Birch, Armington and Odle, and Hayes, Hollenbeck & Marjorie have used the criteria of under 100 employees for the definition of a small firm. However the figure of 500 employees was common a few years back (SBA,1983: 73)

Hertz (1982:433) has defined a small business as a business that is managed by not more than 3 managers, or whose workforce does not exceed 100 persons.

Phillips (1951:5), however took an extreme view of the concept of small business, very much similar to those of the early scientists. His concept referred to two basic factors. First, one where there is "absence or near absence of paid labor". The proprietor is primarily a worker and only secondarily as a supervisor for a few assistants only. He admitted that this was originally the concept of enterprise, which differs significantly from the modern typical type. Second, there is less tendency for expansion due to inability to save, thus

inhibiting expansion. The businessman considers business as basically providing him with a job. Phillips states (1951: 7) that firms employing as many as 50, 100, or even 500 wage earners in one plant under full-time supervision of the employer or his agents, generally

> are preoccupied with the problem of growth; are often incorporated; and in many other ways resemble the still larger enterprise.

Phillips definition was greatly influenced by earlier sociological and economic theorists. Of particular importance were Fred Safier, Alfred Marshall, Scott Nearing and Maurice Dobb (Phillips 1951:41- 44). The underlying notion in their approach was that the majority of small businessmen work for themselves for wages for their labour rather than for profit. They mostly rely on their family members who are sometimes not paid. Phillips therefore proposed to refer to these businessmen as people who managed the whole business for themselves, do all their own work with a few assistants, 'people working for themselves' 'self employed', 'small businessmen' etc.

Phillips (1951: 69) maintained that the basic criteria of small business was therefore absence or near absence of paid labour. He referred to a Department of Commerce in the US government, which estimated that 45% of all firms had no paid employees and 82% had less than four in 1939.

This researcher acknowledges that levels of 500 employees are probably too high, as will be shown in chapter 1 appendix 2 (1A2). It should however be pointed out that such a narrow view of defining a small business cannot be accepted. A question to be

raised is whether for example, a business which employs five people but the owner works full time in another organisation, changes its size as phillips maintains. The main issues raised and their implications for a small business definition should be noted as they will be returned later when defining a small firm for this study in chapter 1 appendix 1A2.1.2 and 1A2.2

1A1.4.2. OBSERVATIONS AND CONCLUSIONS

What emerges from the ongoing discussion is that centralisation and concentration, observed different entrepreneurial characteristics and 'personal management' are not automatically found in every small business but depends on the type of entrepreneur. In acknowledging this, Hertz has argued that the differences in definitions by the social psychologists could be due to one or more of the following factors:

1) the small business studied was not identical; or
2) different characteristics were observed by the scientists; or
3) they used their own personal interpretations.

She therefore argued that although personal management was practised by many small businesses, it was not practised by all or the majority of them and could not therefore be used as "a common denominator in the definition of small businesses" (Hertz, 1982: 151). Hertz has defined a small business as a business organisation managed by 3 persons or with less than 100 employees).

Hertz's view of the need for a common denominator for all elements before inclusion into a small business category is questionable when dealing with social science issues particularly when they involve human behaviour.

First, contrary to Hertz view and conclusions, most studies indicate that the majority of small businesses have *common denominators* such as ownership, independent management small market share and personal management. Second, it is not necessary that *all* small businessmen practice any criteria before it can be adopted for small business definition. It is, for example, indisputable that *not every* small businesses which is owned or managed by the owner. But ownership and management are the two most common criteria upon which most definitions are based including the quantitative one since smallness is related to individual ownership, management and decision making. Once this individuality is lost, most of the characteristics of smallness of the business are reduced. The organisation eventually ceases being a small one and becomes more of a corporation. At that stage it has more in common with large businesses than with small ones.

It would therefore appear that since many small businesses are started, owned and managed by one or a few persons and as Hertz conceded "many small businesses" practice personal management, these criteria, though not preconditions, are therefore important elements requiring consideration in small business definitions.

This, notwithstanding, Hertz's most important points are agreeable. First, it is acknowledge that the criteria, especially independent management, are interpreted in a variety of ways in different countries, industries and situations, as will be shown in the next section. Second, in principle, it is completely accepted that commonality of the criteria being used is important in identifying similar elements such as small firms. Some of the issues to be resolved in arriving at an acceptable solution related to whether firms which do not meet the required criteria such as being owned or managed by one or a few individuals should be disqualified from the small business category. As will be argued in chapter 1 appendix 2 (1A2), such factors are important in order to arrive at an adequate definitions. This is so because differences in such factors ultimately enable one firm to be distinguished from another, even though they may have been on the same level initially. The critical question to ask, however, in resolving the issue is: Does a firm similar in all most important respects stop being small simply because it is not owned or managed by one or few persons, or in a personalised manner? Answers to such kind of questions would help in arriving at an appropriate definition. Briefly, there are situations where a firm may not be owned by an individual or managed by such a person, or even in a personalised manner. But, such firms still remain small in the real meaning of the term. For detailed discussions on these issues refer to chapter 1 appendix 1A2.1.1.2 and 1A2.1.1.3

1A1.4.3 COMPARISON OF SMALL FIRM DEFINITION IN DEVELOPED COUNTRIES AND ZAMBIA

A number of developed countries with different economic structures and histories of small firm policy were selected for comparison with Zambia as per SIDO's definition. The countries were Australia, West Germany, China, Britain and U.S.A. Developed countries were selected because of their long histories in small firm policies and their economic abilities to support small firm programmes. The particular countries were selected for different reasons. U.S.A. and Britain were picked because of their world wide political and economic influence. In addition, U.S.A. has had a small business policy since the legal establishment of the SBA in 1953. Further, the U.S. has the most elaborate piece of legislation on small business. This would be valuable to novice states such as Zambia in developing small business policy. In the case of Britain, small business policy practically became active since the publication of the Bolton report. West Germany was selected because of the important role attached to small firms as well as to represent Europe. Australia represented the Fear East while China stood in for Socialist States.

There were four objectives for comparing the definitions in these countries. First, to show the criteria used. Second, to illustrate the world wide problems in defining a small business (by looking at strengths and weaknesses) and consequently comparing its importance. Third, to find some common denominators for deriving the working definition for this research study. Fourth, the ultimate goal was to attempt to

positively influence official thinking in Zambia in accepting this scientific definition by legalising it. It was thought it would be easier to convince policy makers if a representative sample was taken and problems shown.

1A1.4.3.1 DEFINITION OF SMALL FIRM IN DEVELOPED COUNTRIES

1A1.4.3.1.1. Definition of Small Firm in Australia

In Australia (Storey, 1982: 7), a small firm has less than 100 employees in manufacturing and less than 20 in all other sectors. In this case one criterion of number of employees is used. But it differs according to industry.

1A1.4.3.1.2 Meaning of the Small Firm In the Federal Republic of Germany

The definitions of a small firm in Germany is not clear-cut as indifferent official attitude regarding such a definition exists. Hull (1983: 153) refers to a report where the government indicated it

> does not consider useful any general and schematic definition of 'small and medium' - sized firms.

Small firms are therefore classified with reference to social and political order rather than according to size (economic sense) as in the Anglo-Saxon approach. In this regard, the size of a firm is based upon financial and legal independence of the firm, holding a limited share of the market.

There are therefore three basic definitions of "the firm" (Hull, 1983: 153-154). The first is the 'site' (Arbeitsstte). This is the lowest spatial locational level where business takes

place. The second is the 'establishment' (Betrieb). This is the lowest technical level of organisation, but still at a local level, although it can comprise two or more functionally interdependent sites. The third is the 'company' or 'firm' (Unternehmen). This is the lowest general managerial and legally independent level lf organisation. But it is still lower that the 'enterprise' as used in the Anglo-Saxon sense.

In addition to these basic units (Bannock, 1976: 33-36), for statistical purposes, it is possible for many firms to be wholly owned by one 'quoted company' referred to as 'Gesellschaft'. In turn, this can be controlled by one 'Konzern'. It is equivalent to an enterprise although it has no definite meaning for statistical purposes.

However, in operational terms (practical or research purposes), not all the above classifications are applicable. Therefore, the criterion of size used is legal independence, based on turnover and/or employment (Hull, 1983: 153). Although employment criterion is common, there is nevertheless little agreement on cut-off points between small and large. This is so even between small and medium as there is an overlap. This should nevertheless not be construed to imply lack of small business policy for it is "as old as the republic itself" (Kayser, Winter, 1983: 39-40). Kayser presents the structure of firms' sizes as characterised by the Institut fuv..r Mittelstandsfor shung (Small Business Research Institute):

	Number of employees	Turnover
Small	0 - 449	0 -1mil Dm (£0 - £176,000)
Medium	50 - 449	1m-100 mil Dm (£176,900 - £17,690,000)

1A1.4.3.1.3. Definition of Small Business in China

There had been no written law, in China, until July, 1979 when 7 laws were promulgated after a series of demands for a long time. It is therefore not surprising that no official, legal or juristic definition has been adopted. In spite of this, there is now an official understanding of what constitutes small and medium firms (Hertz, 1982:81). These have been referred to for the first time, by the Beijing Review an official authoritative publication. They are defined as those organisations characterised by little investment, responsible for their own profit and losses, and are flexible in production to easily meet market needs.

The reader is reminded not to lose sight of the objective of discussing these definitions: to critically keep track of a common thread and variations in these definitions. The criteria used in the three definitions discussed so far hinge on both qualitative and quantitative. The former include social and political order and legal independence as is used in Germany; investment which can be quantified, owner responsible/take risks for all activities as is used in China. The later includes number of employees and turnover which are used in Australia and Germany.

1A1.4.3.1.4. Definition of Small Business in Britain

In Britain, the first reference to a small firm dates back to 1931, when the Macmillan Committee Report on Finance and Industry (1931: 173-174) acknowledged the lack of long-term capital for and the subsequent great difficulty (that) is

> experienced by the smaller and medium sized businesses in raising the capital... even where the security offered is perfectly sound.

It recognised that special attention was needed. It therefore recommended that the

> only alternative would be to form a company to devote itself particularly to these smaller industries and commercial issues

as existing financial organisations could not provide it. Although the use of the concept of 'small business' in economic terminology was initially introduced by the Macmillan Committee in its report, it was not defined.

It was not until 40 years later, in 1971, when the Bolton Committee formally defined a small firm. Although it is acknowledged and often referred to, and used even in statistical data, it is not a legal, a juristic or an administrative definition since it has not been officially endorsed up to today (1988). U.K. is said to be the only European country with a semi-official definition of a small business (Hertz, 1982:109).

As Hertz (1982: 4-5), has argued, a definition should be legally defined for it to have the teeth it requires to function based not only on logic, but also on practical considerations. In practice lack of a legal definition is common in many countries. Simple analysis by this researcher of a list of definitions used in 72 responding countries in a study conducted by Aociello et.

al., (1975: 3-53) showed that 64 or 89% reported having no legal definition while only 6 or about 8% had a legal definition. One country only had a juristic definition.

The Bolton Committee (1971: V & 1) was set up by a Royal Commission, appointed by the president of the Board of Trade on July 23, 1969. It was charged with the responsibility of considering

> the role of small firms in the national economy, the facilities available to them and the problems confronting them; and to make recommendations.

Although the small firm was broadly defined, for purposes of their study, in the terms of reference, as being less than 200 employees, it was found to be inadequate. It was discovered that a small firm

> could not be adequately defined in terms of employment or assets, turnover, output or any other arbitrary single quantity, nor would the same definition be appropriate through out the economy.

The committee decided to define a small firm qualitatively and statistically (Bolton, 1971:1-3). The qualitative component is characterised by three main factors. First, it has a small share of the market although it could also have a large share of a very small market. Second, it is managed by the owners, in a personalised way, instead of employees on behalf of stockholders. Third, the owner-managers are legally independent, that is it does not form part of a larger enterprise and is free from outside interference, in taking their main decisions.

The statistical component of the definition was for practical or research purposes. It varied according to industry using convenient break points and according to available

statistics since a single measure of 200 employees given in its reference was found to be unsuitable for all industries. Thus a small firm has been quantitatively defined as having less than 200 employees in manufacturing, less than 25 in construction and mining or quarrying. But it has, as revised upward at 1978 prices for monetary measures by the Wilson Committee (1979: 43):

> an annual turnover of not more than £1825,000 (£730,000) in the wholesale trade; £462,500 (£185,000) in the retail trade, £912,00 (£365,000) in the motor trade, £462,500 (£185) for miscellaneous services except road transport where the cut off point is 5 vehicles (£1 = £0.40 as of Nov. 1984).

The Wilson Committee was set in 1977 to review the functioning of financial institutions and were to find, 4inter alia', the problems of financing faced by small firms. It concluded that small firms still experienced the Macmillan gap in raising start up, development and growth capital in terms of equity, loans and venture capital. It recommended among many things the establishment of an investment organisation with the option of buying back the shares by the small firm when established (Wilson Committee, 1979).

It should be noted that the definitions above do not apply in all situations as different specific statistical definitions based on employment (ranging from as low as 20 to as high as 500), turnover (£ 15,000 - £5 mil.). Beesley, M.E. and Wilson P.E. (1981: 53 -54; 1985: 125) have also reported other criteria used which include fixed assets, balance sheet total, export value, profits and floor space are used for a variety of government assistance. The common denominators of definitional criteria for the four countries shown above have been three: number of employees, financial and independent ownership or owner manager.

1A1.4.3.1.5. Definition of small business in the U.S.A

1A1.4.3.1.5.1. The 1953 Small Business Act

Unlike in U.K., where there has not been any specific small business legislation, in the U.S., the Small Business Act of 1953, which established the SBA was a culmination of a long history of legislation, sympathetic to independent businessmen, beginning with the Sherman Anti-trust Act of 1890 (Beesley & Wilson, 1985: 113). Specific legislation on small business goes back as far as 1913 (Phillips, 1951: 33) when the Senate Small Business Committee, of 78th Congress, 1st session, introduced a bill to "stimulate and encourage small business enterprise". A small business was defined, 'inter alia', to have 500 persons or less for manufacturing, $1mil. in wholesaling, but $250,000 sales for retail, amusement, service or construction, provided that it was not a dominating unit or part of such a unit. This was based on comparative size of establishments in the particular trade or industry involved

This was followed by the Washington Conference of Small Businessmen, called by the Department of Commerce in February, 1938. Since then many articles, books were written, associations formed, and legislations passed by both houses of Congress. This was influenced by the belief in the value of small businesses (Phillips, 1951: 1). The 1948 Selective Service Act was passed and still exists today. Its purpose was to deal

> primarily with military service duties and harnessing of industry to the war effort.

The small business definition therefore came accidentally, prompted by the need to afford chances to small firms to compete for lucrative government contracts after the war. Section 18A of

the Act defines a small business as one if (Hertz, 1982: 64-65):

> its position in the trade or industry of which it is a part is not dominant, (2) the number of its employees does not exceed 500, and (3) it is independently owned and operated

The elements and the assigned order which should be noted are: small market share, finite number of employees, independent ownership and independent management. This process culminated in the main legislation on small business - the 1953 Small Business Act, which defined the small business. The small business definition in the U.S. is not only the most detailed, but also the most complex of all definitions. The Small Business Act of 1953, section 3 (as amended), defines a small business as one which is independently owned and operated and which is not dominant in its field of operation.

In addition to the foregoing criteria, the administrator of the Small Business Administration (SBA), created under section 4, may use the following criteria, '<u>inter alia</u>', in making a detailed definition: number of employees and dollar volume of business. Where number of employees is used, the maximum number that a small business concern may have (s.3; Auciello and Johnson, 1975: 34; Hertz, 1982: 60, 66 & 75).

> shall vary from industry to industry to the extent necessary to reflect differing characteristics of such industries and to take proper account of other relevant factors

These extra numerical criteria left to the discretion of the administrator for benefit entitlement are referred to as regulations. It is important to note the essential elements of the definition: independent ownership, independent management (operation) and a small share of the market in the qualitative element. The indefiniteness in the use of number of employees and

turnover in the quantitative part are also noteworthy. These points will soon be returned to.

Since 1980, the employment level was set at 500 or less by the 1980 White House Conference on small business (SBA.1983: 28 & 31; Ganguly, 1985: 4). The argument was that most small businesses in the U.S.A. employ fewer people since they are sole proprietorships, comprising 12.7 million or about 76% of all businesses. Further, the majority of corporations and partnerships are also small accounting for 2.7 million or 16.3% and 1.3 million or 8.2% respectively. A straight count therefore indicates that 99% of all businesses in the U.S.A. are small.

The definition of a small firm for research purposes is based on the level of employment. The reasons are, first, that data is available in detail. Second, it is a more stable measure of activity than sales or profits because it is not tied to prices. Third, employment variations are helpful in examining differences and changes within major sectors of the U.S. economy or within specific industries.

1A1.4.3.1.5.2. Inconsistencies of the U.S. small business definition

Analysis of the U.S. definition would highlight the criteria used, differences in adopting different criteria within the same country (and industry) for different purposes. It will also show the presence of the three common factors indicated above (employees, independent management and financial criteria). It will also indicate the practical complications and difficulties in implementing definitions. The lessons would be very valuable to Zambia. This will also shed some light on the

required efforts in deriving the definition for SIDO and this research project. The SBA, empowered to represent the small business sector, has recently put the range from as low as 4 employees, with under K1,250 (£ 500) in assets or annual sales for a small family business to a maximum of 1,000 employees and just under K125,000 (£50,000) in assets or annual sales for a large small business. The size limits for assistance eligibility are, also different as the number of employees may be as high as 1,500 in manufacturing (and petroleum based industries) and the turnover as much as K55 million (£22 million) in annual sales in wholesaling (Thompson & Leyden, 1983: 8 & 9). Eligibility for Federal construction contract sets a maximum of £12 million in revenues, while eligibility for a loan guarantee for a construction firm is set at £ 8.5 million or less in sales (SBA, 1983: 28). The assistance eligibility can be for government procurement, sales of government property, SBA loans, government sub-contracts, leases of uranium prospecting or mining rights and surety bond guarantee assistance among others. For further details refer to title 13 (in Business and credit assistance), chapter 1 (Small business Administration Revision 13), Part 121 (Small Business Size Standards) (Aucielle & Johnson, 1975: 35-50). To qualify for assistance for receiving benefits from the SBA, only compliance with all the qualitative elements, and with one of the quantitative ones is required. The purpose of the quantitative criteria is to ascertain the relative meaning of 'small' within each industrial sector (Hertz, 1982: 60).

It is also interesting to note an anomaly in applying the above definition to the U.S. as a whole. In spite of the authority entrusted to the SBA as the agency for U.S. small

business, only 29 states out of 51 use any specific definition and only 14 out of 29 use the SBA definition (Thompson & Leyden, 1983: 9). Florida for example refers to a small firm as any business which is owned or operated independently of any other business entity and which has no more than 25 employees or more than $500,000 in receipt This discrepancy has partly influenced Hertz (1982: 31 & 60) to conclude that the U.S. small business definition is not a legal but a juristic definition. But in her view, it has been elevated to semi-legal because it is the most comprehensive U.S. legislation regarding small business. nonetheless, it is not a legal definition, in its strict sense, because other definitions of the small business do exist.

It is indeed intriguing to perceive that despite the authority conferred upon the 1953 Act section 21 (Hertz, 1982: 61 & 65) of repealing

> all laws and parts of law inconsistent with this Act...to the extent of such inconsistency

another Act, the 1948 Selective Service Act exists at Federal level. However, its initial purpose was to deal

> primarily with military service duties and harnessing of industry to the war effort.

The elements and order in the 1948 Act are:

a) small market share;

b) finite number of employees;

c) independent ownership; and

d) independent management.

These should now be compared with the elements and order in the 1953 Act:

a) independently owned;

b) independently operated;
c) not dominant in its field of operation.

The criteria used in the two definitions are different. But the three qualitative elements of independent ownership, independent management and small market share are the same although they are assigned different order. The main legislation of the 1953 Act, regarding these three qualitative criteria was concerned with a relative size, but with long term effects rather than an absolute one. Therefore, compliance with the qualitative is a precondition to qualify to small business status although the firm will not automatically be entitled to receiving the benefits offered under the quantitative regulations, unless the quantitative employment limit has been met. These regulations, subordinate to the main Act, which is independent of the regulations, were intended to combine the advantages of certainty and flexibility.

The relative size of the 1953 Act is said to be the key to understanding the position of the small business in the U.S. capitalist economy of private enterprise. This is strongly rooted in the philosophy of "full and free competition" which is the only guarantee to (s.2(a) of the Act; Hertz, 1982:60):

> free markets, free entry into business and opportunities for the expression and growth of personal initiative and individual judgement

The differences in assigned order of the qualitative elements in the 1953 and 1948 are a result of putting more emphasis on the private enterprise philosophy in the 1953 Act. The 1948 stresses small market share (and 500 employees) as preconditions for benefiting from military contracts. In addition, the former uses turnover as well as employment. As of 1980, both of them limit employees to 500.

1A1.4.3.2. DEFINITION OF SMALL-SCALE BUSINESSES IN ZAMBIA

1A1.4.3.2.1. Legal Definition of small-scale

In chapter 4.2 reference was made to the implementation of the Zambian Government's policy on small-scale businesses through the enactment of SIDO Act on 18th of December, 1981. Zambia's definition of small scale businesses is both legal and administrative. Since there is only one Act which defines small business, it can correctly be classified as a legal qualitative definition based on capital. But because administrative steps have been taken to redefine a small firm, those sections are administrative. The Act was to (SIDO Act, No.18 of 1981):

> foster and encourage the development of small industries; to provide for the granting of incentives to small industries; to establish the Small Industries Development Organisation; and provide for matters connected with or incidental to the foregoing

Section 2 of the Act defines a small scale industry as: small scale enterprises and village enterprises. A small scale industry or sector refers to:

1) small-scale enterprises, engaged in manufacture (excluding mining) or the provision of services, having capital assets not more than K250,000 (£100,000), or as determined from time to time;
2) village enterprises, engaged in manufacture or the provision of services in respect of which SIDO is satisfied that such enterprise:
   a) is located in a village, rural or semi-urban area;
   b) uses labour intensive processes as far as is practicable, and
   c) uses local raw materials as far as is practicable.

The main differences between handicrafts or village industries and small-scale industries are that village industries are of a traditional nature, utilizing implements and hand tools and are characterized by lack of any machinery with motive power, high artistry and skills. In addition, employment is limited to members of the household or of a particular artisan community. There is also lack of organisation of production, supply and sales. It caters for the local market. Village enterprises fall under the Village Industries Service (VIS), a voluntary organisation registered under the Society's Act.

Small-Scale industries, on the other hand, refer to small modern industries i.e. units using modern equipment and techniques of production and management (SIDO, 1983 (a): 3; SIDO, 1983 (b): 3; Manjappa, 1980: 4).

1A1.4.3.2.2 Administrative Definition of small scale Businessman

In implementing these definitions, it was soon realized that lack of concise definition of the village enterprise would present problems and consequently, an administrative qualitative (capital) definition was introduced for a quantitative limit of K15,000 (£6,000) and below was set. Still further, it appeared that in order to accommodate small business units engaged in the production of parts or components, or sub-assemblies, which require more capital, a third category of small-scale businesses was introduced - the ancillary units. The upper limit of K250,000 has therefore been relaxed and increased upward to a limit of K350,000 (£140,000). In this respect the definitions can be regarded as an administrative definition based on capital. Therefore with these modifications, and treating labour as the

abundant resource and capital as the scarce resource it has been suggested that in Zambia's case, for practical purposes, all types of manufacturing, processing and servicing units should fall under the small-scale industry and classified as follows (NCDP, 1979: 246-351; Manjappa, 1980: 5; SIDO, 1983 (a): 3):

a) enterprises with capital investment of K15,000 (£8,000) and below are categorised as village industries;

b) enterprises with capital investment of K250,000 (£100,000) and below are referred to as small-scale units;

c) business firms with K350,000 (£140,000) and below are called ancillary units.

Taken as a whole, Zambia's small scale industries definition is both legal and administrative. The classification method used is positive since it accounts for small business singular characteristics. The definition is based upon quantitative criteria of capital

The monetary out-off points are limited to investment in plant and machinery only, '*vide supra citato*'. This therefore means that the cost of land, buildings and working capital are excluded in practice, although the Act is silent on these. In spite of this exclusion, Part III section 18 stipulates that a small-scale unit cannot be registered as a small-scale enterprise unless it complies with the provisions of the Trades Licensing Act (Cap.707). In turn, to obtain this licence, the person has to be over 21 years of age and has to meet other regulations. (see chapter 4.7). Since most grade VII school drop outs are about 14 years old, it means they are legally excluded from starting small businesses since they can not obtain trading licences.

Registration, under SIDO Act, entitles an enterprise to become eligible to apply for receiving incentives provided under the Investment Act of 1986 and BOZ guarantee scheme provided under Statutory Instrument No. 52 of 1987 (see chapter 4.7)

1A1.4.3.2.3 Summary

In practice, it therefore means that the legal meaning of small scale industries refers to capital of less than K250,000 in urban areas and use of labour intensive processed and local raw materials as far as is practicable for non-urban areas. The burden is therefore placed on SIDO to determine what is a village enterprise since "as far as is practicable" is indefinite or vague. Officially or administratively, a small scale business has capital of less than K350,000, but more than K15,000.

1A1.4.4. CONCLUSION

A variety of definitions are used in different countries. Definitions may basically be classified into qualitative and quantitative. The former are indeterminate and include personal ownership, independent management, small market share, and local area. The later may further be categorised into human and monetary. Human mainly refer to number of employees with or without the owner or relatives. Monetary refer to capital, sales or turnover, salary, *'inter alia'*.

Up to this point, the analysis has been concerned with the structure of definitions. None of the above definitions, scientific, and those used by different countries was found useful for adoption in this study. The required criteria were

however all there, scattered through out the literature. But there had to be a justification for deciding on a particular criteria and a specific element or quantity. The reasons why none was found suitable are now taken up in the next appendix by evaluating each of the main elements or factors in these definitions which should be helpful in deriving the most appropriate definition for this research. The derived definition was then empirically tested in chapter 7.5.

CHAPTER 1 APPENDIX 2 (1A2) DEVELOPING THE DEFINITION OF SMALL FIRM FOR THIS STUDY

1A2.1 INTRODUCTION

The objectives of this appendix are two. First, to explain the reasons why none of the definitions discussed in appendix 1A1 was adopted for use in this study. This is done by analysing the advantages and disadvantages of the most commonly used elements of small firm definitions. The second objective is to develop a framework and determine the suitable criteria for generating an appropriate definition.

The definitions from scientific researchers and the various countries were unacceptable for various reasons. First, the qualitative definitions (scientific and national) were found difficult if not impossible for practical applications. It is for example acceptable that a small firm should be independently owned or independently managed, or managed in a personalised manner or have a small market share. But the practical difficult when selecting a sample or when analysing whether small firms create more employment than large ones is: How does one determine for example whether a firm is managed in a personalised manner or has a small market share for developing countries such as Zambia where market shares are unknown? Extending the argument to developed countries, is it realistic to determine market shares of all firms that would be included in a sample? The answer is probably not.

Second, quantitative definitions appeared attractive superficially. But when it came to selecting a particular criteria, it was found that there was no basis for selecting a particular one and specifically in adopting a particular cut off point because the literature was confusing. For example 100, 200 and 500 employees limits were used for the manufacturing sector in Australia, Britain and U.S.A. When the study by Auciello et. al. (1975: 59-60) was considered, it revealed that some countries such as Honduras and Jordan had as low as 5 employees, others even less. The big question was: which figure was appropriate for this study and Zambia? Selecting a particular figure had to be rationally and convincingly justified. Consideration was given to using SIDO'S definition based on capital. But literature survey revealed that two years after being enacted, the definition had already been administratively changed from the legal upper limit of K250,000 to K350,000 to cater for ancillary firms. In 1987 (Dhall, 1987:73) consideration was again being given "to revise the ceiling to K500,000). Other literature review also showed that monetary criteria was vulnerable to monetary value fluctuations. The value of the Kwacha for example decreased from £1 = K2.5 in November, 1984 to £1 = K11 in June, 1986, i.e. 340%. The big question is: how does one conveniently take inflation into account for each of the firms started over the twenty year period?

The researcher was therefore left convinced that a new definition had to be formulated for the environment in which Zambia was operating.

1A2.2. TRANSACTIONS OF THE PRESENT DEFINITIONS

It would seem that Kotler's (1976: 7) marketing concept of properly identifying potential customers and their needs; and then applying the marketing management concept of

> designing the organization's offering in terms of the target market's needs and desires

should be the guideline in arriving at an adequate definition for this project and SIDO. Instead most small business definitions are influenced by administrative or political expediency (Thompson & Leyden, 1983: 10).

This kind of situation is seriously flawed because of three reasons. First, as Hertz (1982: 4) has pointed out, a phenomenon without an exclusive definition is a non-existent phenomenon since it cannot be differentiated from others. Second, the result is that small firms which are indeed small in the strict sense of the term do not still receive the necessary assistance, but large firms continue doing so. Third, a more reliable measure is necessary in order to follow up the developments in the structure of the small business sector. This is only possible if measures are not changed too frequently. Such modifications allow organisations which have not transformed materially to either be excluded or included in the definition, by moving from one category to another.

Detailed reasons *'Pro et contra'*, for not selecting any of the existing definitions are now picked up for discussion by analysing the criteria embodied in the main two measures - qualitative and quantitative.

1A2.2.1 CRITICISMS OF QUALITATIVE CRITERIA

This section evaluates the three major qualitative criteria embodied in most of the definitions seen above. These are small market share, independent management and independent ownership. '*Nota bene ab initio*' that using qualitative factors leads to inherent problems. First, there is lack of quantifiable statistical data required to utilise these criteria. Second, it is argued (Bolton Committee 1971 :2) that using qualitative data leads to a situation where large firms end up being included in the small firm category. The Bolton Committee recognised that although a vast majority of enterprises employing less than 200 qualify, as small firms using qualitative criteria, so do also larger business organisations employing as many as 500 people. If that is true, then the question is whether such measures are at all valuable if they cannot be used in differentiating small from large business organizations. Other writers have attributed this confusion to associating smallness to holding a small share of the market.

1A2.2.1.1. SMALL MARKET SHARE

Small market share is explicitly indicated to be an important component of small business definitions in several countries and by many writers. This is reflected in the use of such phrases as 'should not be dominant' in its field of operation as in the U.S. and U.K. definitions. In scientific definitions it is also implied by using such terms as 'should be comparatively smaller' than an average firm in the industry, or 'proprietor serves the customers himself'. The reasons why it is

used in most definitions by scientific researchers and countries were spelt out in the last appendix. These basically relate to the need for an organisation not to overshadow businesses in the market place for it to be regarded as a small one. Use of market share was not accepted in this study for five main reasons. First, it cannot be used to identify small businesses. Second, it is difficult to ascertain the cut off points. Third, in the case of Zambia, market share is a little known factor. Fourth, related to the previous point, is that it is an irrelevant relative criterion which does not reveal the size of a small business organisation. Fifth, it is a redundant measure if other measures such as number of employees can be used. Let us now examine each of these.

1A2.2.1.1.1 Problems of Identification

Although market share criterion is a valid measure, it would nevertheless be important in the sense that this criterion cannot be used to identify a small business. Phillips (1951: 3-4) also expressed similar views when he observed that although the concept of small firm has been debated for a long period of time, because of their significant numbers,

> ...the criteria selected for their identification almost without exception result in the inclusion of larger firms which are qualitatively and quantitatively different from the majority in the category.

He for example referred to Kaplan (the author of one of the few best known works on small business, in the U.S.A., at that time), who expressed doubt as to whether much of the public discussion had been on small business. Kaplan (cited in Phillips, 1951: 31) referred to most of the definitions as "a political shibboleth" since politicians and business representatives who appeared to

plead the case for small business (to U.S. Congress and other bodies) were "themselves within the top 10% of business enterprise". Phillips however noted the fallacy of Kaplan's criticism in that he himself ended up concentrating on "the minority of larger firms within his category".

The problem of identification is best described by referring to deliberations at the U.S. Conference of Small Businessmen in 1938. Phillips (1951: 32) reported that Jesse H. Jones, owner of large business interests in Texas and then Chairman of the Reconstruction Finance Corporation, when distinguishing between large and small, had stated that it was " ... something comparative or relative ...". He made references to organisations like General Motors and so forth which were considered to be big business, but "... the rest of us are little business".

This trap of being misled is attributed to the preoccupation by most writers on monopoly from the legal and orthodox economic point of view. Therefore, this leads to classification of "any firms smaller than the dominant concerns ... as small" (Phillips, 1951: 3-4). For a discussion of the relationship of monopoly / competition issues being an integral part of the small and large business debate, refer to chapter 4.8 which looked at the survival of small business.

1A2.2.1.1.2 **Difficulty in Ascertaining.**

Since any firm smaller than the dominant ones, i.e. the largest firms, are classified as small, the measure of small market shares is difficult to use to delimit the thresholds. This measure, like other qualitative measures, is broadly formulated on the basis that small firms play a significant role. However, this role varies in every sector of an economy, depending on the concentration level of the industry. Since the market share is undefined, it is reflected in the use of other criteria which are quantifiable. The degree of market share is inferred through association with the degree of concentration or dominance experienced in an industry. Thus, manufacturing sector's limit included larger units reflecting the fact that there is greater concentration in manufacturing than in retail for example. The logic on what such a definition of market share is based is that there are always "smaller units" in every sector of an economy "as long as they are not all of equal size" (Phillips, 1951: 38). In the case of the U.S. this logic thinking arose from the need to reduce/discourage monopoly in order to attain 'free enterprise'. Therefore as the same writer indicated, this

> logic looks hopefully at any enterprise smaller than the largest as a potential instrument to break the monopoly of the latter.

He referred to one author who went to the extent of stating that he was prepared to recognise a

> ... small business [as] any business which is not illegal or contrary to public policy.

Public policy here referring to views on monopoly.

Another explanation proffered for the high limit in manufacturing is based upon a recognition that because of high concentration in manufacturing, most businesses have 'a fait accompli' acquired large economies of scale. Hence most of them have passed through the stage of small enterprise whereas subsectors such as retailing suffer from that. Phillips (1951: 40) therefore concluded that since these definitions include very much larger organisations than the small enterprises which make up the greatest majority of the small business populations, small business policy makers have concentrated, consciously or otherwise, on the characteristics and problems of the large firms. He subtly referred to a finding by Research and Policy Committee of a committee for Economic Development, which stated :

> When we talk about small business we are in effect talking about the American business system [emphasis mine]

since the definition used for all firms with less than 500 employees, included 98% of all business units in the U.S.A. [emphasi mine]. He continued, hence, some writers have come to conclude, that the "interests of small business and big business are identical"[emphasis mine]. The question is: if is true that they are identical where does one then draw the demarcation line between small and big businesses?

If it is true that almost all businesses (for example 98% as in the case of U.S.A) are small, and if it is true that the interests and needs of small and large businesses are identical, the implication is that the interests of very small firms which require the protection and assistance through Government programmes have been ignored. But the large businesses who do not need such assistance still continue enjoying the benefits. A

question may be raised how this can be true when even the smallest are in any case catered for. The answer is that most small firms still fail to qualify for such assistance set with the medium and large business organisations in mind consciously or otherwise.

1A2.2.1.1.3. Inappreciability of Market Share.

The small market share criterion is important for small business characterisation since the aim is not to include large businesses. If follows that small market share is implied if a business is in actual fact small. In spite of this acknowledgement, it should not be considered in the case of Zambia since market shares are not known. This is certainly true even for large businesses. There are no marketing organisations such as those that exist in the U.S.A. and U.K., which report on marketing performance on a majority of businesses. Note here that reference was made to a majority, because even in developed countries practically determining shares of a business, especially small firms, is very difficult. This is so because (Bolton, 1971: 1 & 2; Curran, 1978: 5):

> ...insufficient data is available on the management, organisational structure and marketing shares of British firms

It is however recognized that in some cases, this lack of data especially on small firms in the U.K. is presently partly a result of a deliberate government policy to reduce the amount of data required from small firms, upon recommendations of the Bolton Committee itself and the Wilson Committee. Most small firms complain of such extra administrative burdens.

1A2.2.1.1.4. **Difficulty in revealing size**

The fact that it is not easy to demarcate border lines between small and large businesses and being unimportant in practice as in the case of Zambia, logically leads to the fourth problem. It is a largely irrelevant criterion due to its inability to correctly reveal the size of a small business organisation. Hertz (1982: 428 -429) also expressed similar views that this criterion is "not symptomatic of the size of the business". She argued that a market share is an external factor related to the market and not to the actual size of a business. Inclusion of this criterion, it is pointed out, would bar one organisation similar in all respects such as same number of employees, turnover, assets and managerial structure from qualifying as a small firm, if it had a larger market share in one market, while another firm with a smaller share of the market in another market will be referred to as a small firm. She further stated that a small firm can monopolise or share with others a market ignored by large firms. (refer to the discussion on limited markets as a factor for the survival of small firms in chapter 4.8.) But that could not change its actual size or its mode of operation. She concluded:

> a situation where identical enterprises have different rights and duties because of an external factor, the size of a market, is unacceptable.

Curran (1978: 5) also argued on similar lines. While disputing the appropriateness of market share criterion, he pointed out that many small firms have large shares. Sometimes these are even dominant shares of their markets possibly due to the fact that many small businesses provide specialised products

and services in areas, where for various reasons, large or small firms elect not to compete (for details, refer to the discussion on sheltered markets as a factor for the survival of small firms in chapter 4.8). The implication of Curran's comments is that being dominant in an area is not necessarily an indication of large size. His observations should therefore be explained in terms of lack of economies of scale, or concentration, in those industries, as seen earlier, such that even though these small firms are dominant, their shares compared to the economy as a whole are still small.

It is the use of unspecific terminologies such as not dominant which leads to claims by many firms (except the largest) that they are not dominant. The question therefore is what level of dominance leads to disqualification. A firm need not be dominant to be categorised as a large firm. Dominant firms are generally speaking the largest firms in an industry or even a in a country. These account for a very small proportion of between 5 and 10 percent. It is therefore not surprising that large firms, which are not dominant claim that they are small ones. Most literature (as seen earlier) also claim that most firms are small, comprising even up to 99% of all firms! (*vide infra* section 1A2.1.2.2.3). Conversely, dominant firms in very small markets are not large firms. The critical issue to resolve therefore is how small a very small market share is for a firm to qualify as a small firm. Unfortunately, nobody has a solution. If this is the case, the question to pose is: Is such a criterion helpful? The answer in certainly not. It is therefore proposed that to get around this problem, all what should be required for classifying a firm is to state that a firm is larger

when it goes beyond a certain size. The only remaining crucial function would then be determining that size. This can easily be dealt with by transforming suitable qualitative criteria into quantitative criteria and then directly using quantitative rather than qualitative criteria. If such a criteria are acceptable and the criteria can be adequate, the next question then is why the market share measure is needed. This leads to the fifth criticism of using market share as a yard stick: super-abundance.

1A2.2.1.1.5 [redacted]

It is contended that if other criteria can be effective in identifying, delimiting, gauging and revealing size, then market share standard in any definition is superfluous. This is so because, if an adequate yardstick is chosen, it should then follow that each of the small businesses will have a small market share though severally they could have a large market share. This argument is given more weight by evidence that none of the countries covered in the literature survey for this study has been reported to be using the market share criterion in practice. This was despite the fact that some of them had been reported to include this criterion in their definitions, notably the U.S. and U.K. (Herts, 1982: 59 & 110). In the case of the U.K., this should be perplexing because market share could be deemed to have been highly rated since it was the first requirement as seen earlier in appendix 1A1.4.3.1.4. This omission of market share criterion in practice is also true in academic research. The common practice in the U.K. is to use number of employees, at least in manufacturing. The question then is: what is the usefulness of such a measure if it cannot be applied? Why then not leave it out altogether to avoid confusion? In the light of

available evidence it is suggested that since it is practically important, it be excluded. Nothing would be lost if an adequate criteria is adopted. A small firm will necessarily have a small market share.

1A2.2.1.2. INDEPENDENT OWNERSHIP

It will be recalled that independent ownership is one of the three most commonly used qualitative factors. It was earlier shown that in the case of U.S.A., it is the first criterion, indicating the importance attached to the free enterprise system. In the case of U.K., it is the third measure expressed in terms of legal independence and not forming a part of a larger enterprise. The managers should also be free in making their principal decisions. In the U.S., a small firm is independently owned and operated. The criterion's position is also third.

Before evaluating this criterion, it is important to first distinguish between ownership and management; and second, to clarify the meaning of independent ownership by referring to the usage of this term in the U.S. and U.K. It should be stressed that it is necessary to separate ownership from management. The main reason is that although it is factual that ownership and management are inseparable from small business since most small businesses are owned and managed by the same person, it is also a truism that others are not. It is in this sense that Kaplan's (1948: 17) definition of small business, as meaning

> ... typically, an identity of management and ownership ... a personal relationship between owners and employees and customers ...

which has been hailed by Davies and Kelly (1972: 47) as a "... more comprehensive definition ..." is still not a complete definition. Ownership is sometimes separable from management in a small business. Reference will soon be made to such cases in the Zambian situation when management of small firms owned by full time employees elsewhere is discussed.

Although independently owned is rated the third element in both U.S. and U.K. definitions, there are differences in emphasis. For the U.K. criterion, it is expressly stated that it should not form part of a larger organisation. The implication is that it should be owned by one or a few persons. This is made crystal clear from the second criterion where it is stated that the firm is managed by the owners or part owners in a personalised way. It appears that in the U.K. those who were formulating the small business definition were influenced to limit ownership to one or a few individuals because only formation of a private unlimited company by at least 3 people, maximum of seven was possible at that time. The 1980 Companies Act also now allows a private limited company (Britain, Cmd 8171, 1981).

The US definition is mute on ownership by a couple of persons. The only requirement is that it should be independently owned and operated. This independence is exercised, basically when original owners control 50% of the shares. A corporation form of ownership is permitted in the US. A corporation can even own shares in a small company as long as it is less than 50% or if owned by many shareholders, it does not own the majority of shares (Hertz, 1982: 63). A firm is therefore not independently owned if it is controlled by another concern. This means it is affiliated to another if:

1) another concern controlled, or had the power to control another or;

2) when a third party or parties controlled or had the power to control both concerns.

In order to determine ultimate control, common ownership, common management and contractual relationships are taken into account. In a corporation, it is therefore possible for management to control the firm. The implication is that individual or part ownership is not *'conditio sine qua non'* for a small business definition in the U.S.A.. It appears that one reason why the U.S. was influenced in including corporations in the ownership for small businesses is that apart from the partnership and sole trader, the other major classification in the US system for forming a business is the corporation or the limited company. Until recently, it had no limit on the number of shareholders. Still further, it did not differentiate between public and private corporations, as both had the same legal rights and duties (Hertz, 1982: 389).

The concept of independent ownership, and the special interest in the position of the small business in the US economy is the basis of a free enterprise system, which is based on a firm belief in a multiplicity of presumably economically independent people. This concept was initially basically related to independently small farmers gainfully occupied. But since the decline in their relative and absolute numbers from 28% in 1880 to 8% in 1949, there has been a shift of emphasis from agriculture to "a multiplicity of independent people" in small business enterprises where the numbers still continue to grow.

The decline in all independent "entrepreneurs" in the labour force was from 37% to 18% during the same period (Phillips, 1951: 3).

As it has just been shown above, independent ownership is used in a variety of ways. This therefore raises questions as to the suitability of this criterion as a yardstick to identify, delimit, gauge and reveal the size of a business firm. Inclusion of independent ownership, in SIDO's or the definition for this research project is opposed to for five fundamental reasons. First, there are difficulties in identification of ultimate control. Second, only nominal independence is possible. Third, ownership of two establishments by an individual or enterprise is common. Fourth, ownership by a private or public corporation take place in the US and Britain. In addition to these, in the case of Zambia, ownership by a minimum of 10 persons, on a co-operative basis, and even by government are allowed. Fifth, official policy in Zambia accepts all types of ownership of a small business firm. These reasons will now be explained.

1A2.2.1.2.1 <u>DIFFICULTIES IN IDENTIFICATION OF ULTIMATE CONTROL</u>

Although superficially, it looks very simple to identify who controls a business firm, it is unfortunately problematic in actual practice, unless it is a one man organisation. Even in this later case, the person who finally controls the firm, who should be free in making principal decisions, may not necessarily be the owner or part-owner and the manager at the same time as is required in the U.K. definition. This information will sometimes be known only upon close scrutiny of such a business firm. Determination of who controls a business firm is more complex in

a corporation as this would require examining contractual obligations to determine common ownership and management as in the case of U.S.A. Such kind of information may not be available in full from agencies. As a result none of the literature review revealed any scientific researcher who has used such a criterion based on analysis of contractual obligations in practice. In the U.K. and U.S.A., researchers such as Ganguly (1984: 12); and Birch (SBA, 1983: 85), using VAT and Dunn & Bradstreet sources of data respectively have only been able to base independent ownership categorisation on single establishment and enterprise classifications. It is however possible to use more detailed contractual obligations analysis in determining qualification to government programmes.

An enterprise refers to a consolidated company while an establishment refers to an individual business location which may be one of several owned by an enterprise (SBA, 1984: 83). The distinction is not important for very small firms with for example less than 5 employees because establishment and enterprises are identical. The distinction becomes critical from 5 to 200 and 500 (and especially beyond) in the cases of U.K. and U.S.A. respectively. This is so because an enterprise may contain, on the average, more than one establishment even though it may be defined as small according to accepted criteria. Attention is now moved to the second criticism.

1A2.2.1.2.2 **Nominal independence**

Many writers (Scott: 1980: Golby and Johns: 1972, Curran: 1978) on the reasons why self employment is selected compared to working for another company, have reported independence as the most frequently mentioned reason. But it is commonly recognised that 'independent' is a highly elusive term and legal independence in the sense of owner-manager in major decision making is far fetched from the reality. Although references are made to legal independence in most literature and in US and U.K. definitions, what is literally meant is independent from outside influence or control in making major decisions. This is explicitly made clear in the U.K. definition while US definition refers to legal independence ownership. In terms of decision making, many firms, especially small ones, are only nominally independent. They are tied to larger organisations on which they are highly, if not completely dependent, thus being restricted in their decision making just as an employee is by the owner. They rely heavily on other organisations for financial assistance (*'vide supra'*), such professional venture capital, factoring, trade credit (Phillips, 1951: 102; Mancusso, 1973: 69; SBP, 1984: 1 & 2). They are also dependent on them in such areas as sources of supply, market outlets for products, pricing (Phillips, 1951: 95; Davies and Kelly, 1972: 55-56; Curran, 1978:5). Small firms are also literally strangulated through contractual arrangements such as exclusive dealing, leasing, franchising, and supplies of raw materials thereby acting little more than agents (Phillips, 1951: 7 - 8). Subcontracting a large proportion of the work of large firm to small firms or entering into ancillary relationships as is the case in Japan (Storey, 1982: 14 - 15),

severely limits the capacity of decision making. Subcontracting sometimes literally results in the small manufacturer becoming "... the manager of a branch plant ..." (Mayer, Sep., 1947: 346; Phillips, 1951: 109). Davies and Kelly (1972: 9), in their research report to the Bolton Committee acknowledged:

> ... it should also be recognised that many small firms functioning as supplies or subcontractors have become in effect satellites of some large concern and have lost their real independence in the process.

They also refer to a memorandum of evidence submitted to their Committee of Inquiry by NEDC in which it was observed:

> ... small firms live as subcontractors in the shadow of large firms often simply providing a reservoir of surplus capacity which the large firm can call on in times of boom and which can be shed in times of recession.

Demands for prompt credit repayments by large firms while they themselves delay in paying small firms put the later in tight credit positions (Golby & Johns, 1971: 33). Phillips, *'opere citato'*, discusses other restrictions on independence including low salaries than if they were employed, instability and mortality, all which disguise unemployment of the founders. He argues that in reality the

> .... flight from unemployment ... tends to limit their independence, especially during periods of unemployment.

From the ongoing discussion, it is clear that many if not most small businesses are not in reality independent. They still have to consult or at least take into account other parties when making their decisions, just as managers in large firms do. The question is: Would it then be valid to categorise such small firms as large firms simply because they are not independently owned? Does the structure change? The relevance of this 'independent in decision making' as being part of the criteria is then questionable if in practice small firm owners are in fact

dependent. Does it not make more sense if the whole argument is based on changes in the structure rather than on sentimental reasons which are even indeed difficult to verify?

1A2.2.1.2.3. Ownership of more than one establishment

The requirement that a small firm should not form part of a larger enterprise is vividly stated in the U.K. definition and in the case of the U.S., it is implied by the use of independent ownership, a belief in a multiplicity of small businesses of the free enterprise system. Other literature as seen above also imply this. This is an important factor which helps in distinguishing between large and small firms.

Some of the reasons for this requirement are that being part of a larger organisation confers some benefits such as purchasing power, advertising coverage, management, capital and credit accessibility. Owner-managed may not enjoy such benefits and may face different kinds of problems. As an example, in Tanzania, Zambia's neighbouring country, 80% of the firms surveyed which had working capital credit constraints were small firms (Wangwe, Jan., - Feb., 1977: 70). The Small Business Administration (1983: 80 - 81) also discovered that apart from regional and state differences, there were also differences in the ratio of births between single establishment enterprises (mostly with 100 employees with a ratio of 1.66 and multi-establishment enterprise with a ratio of 2.48 between 1978 and 1980. This implies that large firms opened new branches and subsidiaries about 2.5 times faster than they closed them. The argument therefore is that if these factors are not taken into account, they would give wrong

impressions as to how small firms perform. Governments' policies (Zambia included) are aimed at encouraging individuals, not Corporations or conglomerates.

It is accepted that separate ownership of a single enterprise, preferably by an individual or a couple of persons as opposed to ownership of several establishments is a fundamental and necessary criterion in developing a small business definition. This notwithstanding, the fact that it is not sufficient should not be overlooked. Family ownership (and operation) of a highly concentrated single enterprise or (establishment for that matter) is quite common in a large number of industries, especially in developed countries. It would be naive to pretend that such types of capitalistic firms which may be very large enterprises in an industry and/or economy should nevertheless be regarded as small firms by the mere fact that owners are separate or independent from outside control (and manage the business as they wish). It is the realisation of this dilemma that has greatly influenced many people concerned with small business formulations to demand that the owners must manage it in a personalised way. The idea being that if a firm is too large, such kind of management would not be feasible. This extra requirement has its own loopholes as will be explained later. It is however sufficient here to note that it is inconceivable that a firm with 299 or 500 employees would be managed in a personalised manner.

If these arguments are acceptable, it therefore follows, '*falsus in uno, falsus in omnibus*', that a firm employing for example 200-500 people (though single) is not small since more managers are involved. Consequently personalised management,

which is a requirement according to the proponents of this criteria, is missing. In his study of management attitudes and techniques, Swan (1971: 41-43) found that the number of average managers and supervisors were 8.2 and 8.4 respectively for size of firms employing 100-499. However, the figures were 3.8 average managers and 2.9 average supervisors for firms employing 20-99 people. This clearly shows that a small firm has fewer manager and supervisors. As regards the span of management, he reported that the ratios of managers to other employees were 1:25.8 and 1:14.2 for 100-499 and 20-99 size of firms respectively. This again confirms that on the average a manager could handle only about 26 employees in a large firm while this was 14 in a small one. Similar results were arrived at when breadth of ownership was broken down into two major categories of family and non-family. The average number of managers employed was found to be 6.9 and 9.14 for family and non family respectively for the firm size of 100-499. This was 4.0 and 3.35 in the case of the size of firm of 20-99 employees. In terms of ratio of managers, again similar results were derived as this was 1:29.4 and 1:21.5 for family and non family respectively for the large size while it was 1:13.5 and 1:13.6 respectively for small size.

Evidence above has convincingly shown that a firm employing more than 200 people, although owned by one person, enjoys favours, different from those of small firms employing for example 20 employees or less. It also encounters different problems. Therefore, if the proffered arguments about having an advantageous position by firms which form part of another organisation are acceptable, they should equally apply to a single large establishment owned by an individual. The

implication is that ownership of a single establishment is not *'prima facie'* evidence that a firm is small. The major issue therefore remains of how to identify a small business using the criterion of not forming part of a larger enterprise. There is however a better way of dealing with this problem, as will be noted towards the end of this appendix by deciding on the appropriate cut off point regardless of the number of establishments forming an enterprise.

The opposite view derived from the last statement is therefore that mere ownership of more than two establishments does not necessarily transform such small businesses into large ones or a combined single large enterprise. It appears that the critical point is whether the total size of such small enterprises is larger than a cut off limit. In Zambia, as in many other countries, it is quite common for an entrepreneur to form more than one business organisation. But only one or two of them may get off the ground. In addition, all of them can remain so small and separate to qualify to be referred to as small businesses.

Indeed in practice, the reality of forming part of another larger enterprise for small businesses has long been recognised and accepted. Davies and Kelly (1972: 10) for example acknowledged:

> However, it should be noted that the ratio of establishments per enterprise, which was 1.3 to 1 in 1963, has been growing. ... While it has been estimated that in 1958, approximately 11.5% of small establishments were owned by large firms by 1963 the proportion had grown to almost 14.5%.

A more interesting but contradictory evidence for rejecting the criteria of ownership of more than one establishment in small firms was derived from a study by Ganguly (1985: 12). His interest was to test the three qualitative factors in in the U.K. definition, two of which will be considered here. These are that: 1) owner-management must predominate with no outside control in decision making and 2) it should not form part of a larger enterprise [emphasis mine]. The statistics found are reproduced in table 1A2.1. The figures clearly show that on the average there was 'not a single sub-sector' in the manufacturing industry which had one establishment. This meant they failed to meet the requirement of 'not forming part of a larger enterprise'. However, those firms employing less than 99 people had, on the average, one establishment (but still more than one). It could be argued that they more or less did not form part of a larger enterprise and meeting the second condition. If so, according to his argument, they were more likely to be owner-managed. But other enterprises employing more than 100, without any exception, had more than one establishment, thus forming part of another enterprise. Ganguly should have concluded that strictly speaking, they failed to meet the second conditions. These statistics were however misinterpreted to mean that

> ... the table shows employment size bands in each industry for which there is 'a majority'[single quotations mine] of enterprises containing a single establishment, thus conforming broadly

with the second condition. He stated further, that firms with 200 employees were more likely to be owner-managed, thus satisfying the first condition.

Table 1A2.1 Number of establishment per enterprise, by size of enterprise, U.K. 1978

Ratio

SIC order (68)	Industry	Average number of establishments per enterprise- in enterprises with between: 1-99 Employees	100-199 Empl.	200-499 Empl.	500-999 Employees
XI	Vehicles	1.04	1.15	1.51	2.02
IV	Coal and petroleum products	1.05	1.38	1.55	2.20
IX	Electrical engineering	1.04	1.28	1.44	1.72
V	Chemicals	1.05	1.38	1.70	2.55
X	Shipbuilding, etc.	1.04	1.47	1.40	3.14
VI	Metals	1.04	1.31	1.76	2.62
III	Food, drink and tobacco	1.05	1.20	1.62	1.72
XVI	Bricks, pottery,glass,cement	1.07	1.59	3.01	2.62
XIII	Textiles	1.04	1.34	1.67	3.21
VII	Mechanical engineering	1.4	1.37	1.91	2.79
VIII	Instrument engineering	1.04	1.19	1.78	2.03
XVIII	Paper, printing and publish	1.04	1.64	2.00	3.64
XV	Clothing and footwear	1.03	1.22	1.50	2.03
XII	Metal goods, n.e.s.	1.03	1.38	1.92	3.78
XVII	Timber and furniture	1.03	1.38	1.95	3.34
XIV	Leather, etc.	1.03	1.26	2.61	n.a.

Source: Ganguly, 1985: 12

The main conclusion to be drawn from Ganguly's study is that it verifies that some small establishments (those below 200 employees) form part of another enterprise. Consequently, more than one person are involved in their management. They are also not necessarily managed in a personalised manner. If this conclusion is correct, why are such firms then referred to as small firms when they do not meet the requirement of not forming part of another large organisation? What purpose does such inconsistent requirement then serve? It is proposed that this requirement be rejected since first, it leads to a situation where one firm may be disqualified while another may be accepted. Second, it may end up serving no purpose since firms which form part of another may be accepted as being small. Third, in

practice, small firms, do exist in spite of the fact that they form part of another firm. The alternative proposal is that a small firm should not form part of an enterprise which is larger than a certain minimum quantitative cut off point. This requirement would take care of independent and personalised management. The cut off point determination is discussed in appendix 1A2.4.

1A2.2.1.2.4. Ownership by more than one individual

Another important factor brought out in the definitions is that a small firm should be owned preferably by one individual or at most few persons. The Bolton Committee (1978: 6) reported:

> Over 85 per cent of respondents are controlled and almost certainly owned by one or two people; this was true for both manufacturing and no-manufacturing. A further 13 per cent [in manufacturing] are controlled by three, four or five people

The only exception here is the U.S. one which does not require that a small business be necessarily owned by a private individual since 'independent ownership' is widely interpreted to include majority shareholders and public quoted companies. It is accepted that ownership of small businesses by public corporations or the state should not be encouraged in Zambia. The reason being that the real motive for establishing the SIDO Act by the government was to enable individual ownership.

The assumption that small business and individual (private) ownership are correlated, though a common expectation, is inaccurate because many small firms are in practice owned by private and public corporations in the U.S.A and U.K. (U.K. is discussed towards the end of this section). In the statement of the Bolton committee quoted above that 85% are controlled and

owned by one or two, it may be questioned who the owners in the remaining 15% of the cases are.

In Zambia's case, it sounds ridiculous to accept views such as those of Phillips that absence or near absence of paid labour should be the criterion for small business definition. There are several reasons why it is compelling to accept ownership by more than one person. First, sole proprietorship has unlimited liability. Many organisations in Zambia, for example, financial houses and commercial organisations do not like dealing with individuals. Second, owners also feel insecure forming a sole proprietorship. Third, as a result, people prefer forming private limited companies, with a minimum of two directors but not more than 50 persons. This is easily accomplished by forming a family business. There is however a total of six forms of ownership possible in Zambia. These are: 1) unregistered sole proprietorship, 2) registered sole proprietorship, 3) partnership, 4) private limited company, 5) public limited company and 6) a co-operative society (under the co-operation Societies Act Cap. 689). It is not the intention to give full discussion of each of these in this appendix (see the relevant references for this). The purpose is to show that with the exception of sole proprietorship, the others require more than one person to form.

1. Un-registered sole proprietor is the smallest and easiest type of organisation to start. There are no formalities or legal requirements. In addition, no registration for VAT are necessary before starting to operate, if value of goods are less than K10,000. This mode of business is usually opted for by the

informal small businessmen.

2. **Registered proprietorship** requires, registration of business name under section 3 of Cap. 667 (Registration of Business Names Act). The registration is required not only for an individual but also for a partnership, or a corporation with a business in Zambia, but not operating such a business in the real names of the proprietor. Note that in practice proprietorship may involve more than one person (it may even be a company).

3. **A Partnership** is unincorporated association of two or more people carrying on a business in common with a view of making a profit. It may be formed orally or in writing or can be implied through conduct, under the Partnership Act of 1890. A partnership may be limited or unlimited. In the case of the former, the partners' obligations are limited up to the amount contributed to the formation of the partnership. In the later situation, their personal assets may be taken to make up for any deficiency. This type of business is not common in Zambia.

4. **Private limited company** formed under the Companies Act, Cap. 686. It requires the separation of the owner from the legal business entity. At least two persons but not more than 50 including family members and employees may form such a company for a legal purpose. There is however a restriction on invitation to the public to buy shares. There is no minimum capital required. This is the most ideal and common type of business ownership by the majority of individuals in Zambia because it is favourable to financial institutions and other businesses for credit transactions

5. A public corporation created under the companies Act can be made in a variety of ways. Individuals or foreign investors or corporations can initiate a corporation, where 100% of the shares are owned by them. Very large organisations require state participation as per 1968 economic reforms. In such a case a parastatal organisation, may be formed by an individual or foreign investor or a foreign government with the State (refer to chapter 3.5 on economic reforms). Statutory boards such as SIDO, can also be formed and owned by the government only under statutes instituted by the house of parliament.

6 A Co-operative is formed under the Co-operative Society Act, a corporate body just like a company, supported by a minimum of ten persons (or two co-operative societies) i.e. two fifth of share capital, with the primary objective of promoting the interests of the members. The minister and Registrar of Co-operative Societies is required to assist co-operators in terms of finance and co-operative education.

It should have been noted that it is not possible for a sole proprietor to form a legal limited liability company which would enable him to obtain loans from financial institutions. In theory feasible alternatives therefore are to join other persons to create a partnership, a private company, a public company or a co-operative society. In practice most people prefer forming private limited companies (usually with dormant family members such as a wife or children to satisfy the requirement of 2 directors). This is because the majority of people in Zambia prefer to conduct businesses as individuals. Hence the partnership and co-operative forms are not popular, except in professional fields such as accounting and law firms. Most

ordinary people do not either have opportunities of buying shares in public corporations as there is no stock exchange.

In Zambia's case, it is therefore a fallacy to claim that small firms can only exist if created by a private individual or even by a couple of persons. Any form of ownership described above can result in a small firm. It is for example quite possible for a small firm promoter or the government directly or indirectly through SIDO to initially have some control or ownership in a small start up or existing organisation as a precondition for substantial assistance. Small Enterprise Promotion Limited (SEP), a private limited business promotional organisation, provides equity capital and helps small business start ups from initial stages. It performs all the necessary activities up to registration before handing over the firm to the owner. But it retains control by owning some shares initially.

In Zambia, personal ownership (and management) should therefore not be *'conditio sine qua non'* for the definition of small scale businesses. SIDO's Director, Ngandwee (June, 1982: 143), has recently (publication came out of press in 1985), clarified this point when he stated that SIDO gives

> preference ... to entrepreneurs who can personally run their enterprises. [But] Corporate arrangements and/or the provision of management services by SIDO are also encouraged.

Some of the forms of ownership are not limited to Zambia only. In the case of U.K., there are some firms owned by 11 people and over. In manufacturing, "only about a fifth of firms are wholly owned by one person" although the Bolton report indicated that in retailing, sole proprietorships predominates.

In addition, small corporations are now possible since the companies Act of 1980 has reduced the minimum number of members required to form a public company from seven to two (Companies Act, Section 2(1); Hertz,1982: 427). Davies and Kelly (1972: 48), in a study commissioned by the Bolton committee revealed that although most small manufacturing firms, (employing fewer than 200 persons) are private companies, other forms also exist. Private companies account for

> 81 per cent, ... sole proprietorships account for 10 per cent most of them very small, nearly 90 per cent of such firms employing fewer than 25 persons. The remaining 9 per cent or so is made up of public companies 0.4 per cent, unlimited companies 2.3 per cent, and partnerships 6.2 per cent.

The Committee may have been influenced in arriving at its definition by the finding that there was high concentration of ownership in the few hand as 39.4% of small limited liability companies were legally owned and controlled by one shareholder owning at least 50% of the shares. In another 46.3% two shareholders had a controlling interest. But only in 0.5% of the cases had more than ten shareholders forming a majority interest.

When describing the boundary of the small firms falling in its definition, the Bolton Committee (1971: 4) however had difficulties and was indefinite as is shown in its statement:

> ... the majority of all the small firms with which we are concerned are unincorporated, that is to say they are sole proprietorships and partnerships. Very few quoted public companies fall within our statistical definition;.... the closest definition in legal terms of the population of small firms in the industries in which we are interested would probably be all the proprietorships and partnerships and "close" companies, although quite a number of close companies are again too large...

Defining what a phenomenon is means explaining what it is, not what it should be. As a result, all available evidence indicates that small firms are not always owned by one or a couple of people. They can be owned by another private or public corporation by a group of people forming a co-operative or by two co-operatives. The most important criterion should therefore be co-ownership and not necessarily ownership. Ownership is a qualitative definition while co-ownership is a quantitative definition (Herts, 1982: 367). Since a small firm does not necessarily change its characteristics if other forms of ownership exist, is it then not wise that independent ownership and in particular by one or a few persons be dropped from the definition?

This notwithstanding, it is equally absurd to view as a small firm any enterprise which is not dominant, such as one employing 500 people or any firm owned by corporations and public companies, which would technically qualify. Therefore the only way to get out of this dilemma is to put a reasonable limit on the total number of employees under the whole enterprise, not establishment. This will result in excluding large public organisations. It this was not done, when evaluation the contribution of small firms, this would be unfair because it would result in exaggeration of their contribution. Such businesses though physically and individually small are severally large.

1A2.2.1.3 INDEPENDENT MANAGEMENT

The third common qualitative factor is that a small firm should be managed by owners or part owners in a personalised way, as is used in the U.K. or that it should be independently operated as is used in the US definition. In the U.K. definition, this was specifically stated by the Bolton Committee (1971: 2) in requiring that it should be:

> ...managed in a personalised way. [By this, it was meant] ... that the owners themselves actively participate in all aspects of the management of the business. ... [Although a few supervisors are allowed] ... the owners themselves still take all the principal decisions and exercise the principal management functions.

The Bolton Committee (1971: 6) further reported that in Britain:

> virtually all small firms are managed by those having a controlling interest, usually the founder or members of his family.

Some Zambian commentators such as Lisimba (1984: 2) have also already started arguing that management by owners should be part of the small business definition. It was shown in section 1A2.2.1.2.3. that the span of management is limited in almost all organisations. Therefore it is incredible that a firm with 200 or 500 employees can be managed in a personalised manner. Hence other managers would be needed to help the owners. Swan (1971: 41-43) found that a total of 16.4 persons (8.2 managers and 8.4 supervisors) would be needed for firms employing 100-499 persons. The ratio of managers to other employees was 1:25.8 for the same size band.

It is an accepted fact since time immemorial and in the days of Moses (Exodus 18: 13-26) that a person's span of management is limited and hence he needs to delegate some duties to other people. Moses' father-in-law, observed that Moses was taking his

seat to serve as judge for the people from morning till sun set. He was not pleased when he saw this and asked him:

> What is this you are doing for the people? Why do you alone sit as judge, while all these people stand round you from morning till evening?

However, Moses replied:

> Because the people come to me to seek God's will. Whenever they have a dispute, it is brought to me, and I decide between the parties and inform them of God's decrees and laws.

But Moses' father-in-law counter responded:

> What you are doing is not good. You and these people who come to you will only wear yourselves out. The work is too heavy, you cannot handle it alone. Listen now to me and I will give you some advise. ... You must be the people's representative before God and bring their disputes to him. ... But select capable men from all the people ... and appoint them as officials over thousands, hundreds, fifties and tens. Have them serve as judges for the people at all times, but have them bring every difficult case to you; the simple cases they can decide themselves. That will make your load lighter because they will share with you.

Therefore Moses listened to his father-in-law and acted as he was advised.

Almost all literature on the subject in the area of organisation and management (Hicks, 1974: 145 -146; Koontz & O'Donnell, 1978: 177 - 178) also indicate that a manager's span of control is limited. The normal span of management has been found to be between 4 and 8 subordinates at the upper levels of an organisation and 8 to 15 or more at the lower levels. Others however categorically state that

> ... no person should supervise more than five or at most, six direct subordinates whose work interlocks ... (Urwick, 1952: 53).

There are ofcourse exceptions depending on the type of industry and abilities of the manager and level of education of employees among many factors. The span of management is larger in

industries such as assembling. But the highest number can be as high as 20 to 30 Koontz reports. Therefore, management of 200 to 500 workers in a personalised manner is not easy. Hence other managers will be needed to help the owners.

The cut off points of 1,500, 1000 or 500 or even 200 employees for the definition of small firms is therefore rejected irrespective of the purpose of the definition, mainly because it presents an exaggerated view of the number and importance of small firms. Hertz (1982: 111) has also rightly commented:

> It is an accepted fact that to manage successfully a 200 employee production unit in a western free-economy country, one needs a structured style of management

Other writers such as Hollander (1967: 4-5), Kaplan (1948: 17) and Drucker (1982: 202) have made similar comments on the size of management structure and size of an organisation.

Since it is very unlikely that one person can manage 200 or 500 employees at the same time, let alone in a personalised manner, if this requirement was strictly adhered to, most business organisations employing large numbers of people would not technically qualify. If that is the case, the need for such a criterion which is frequently ignored is therefore questionable.

In addition to the span of management, the second difficulty relates to the practical application of personalised management in the case of Zambia. Some small firms, in the true sense of the term, are not managed by owners or part owners but by surrogate owners because of leadership code (see chapter 3.4.5).

As a result, many small businesses are paradoxically partly owned or completely owned and controlled by disguised directors or persons who are concealed from any involvement in business

activities. It is conspicuous that such businesses are managed by relatives on behalf of owners, but the former appear to be the owners to outsiders although some decisions are made by absentee managers. It would therefore be misleading if such businesses were excluded from the small business category merely because the owners were not involved in management. This would be incorrect because such small businesses do not change their status. This therefore shows that management (and ownership by a few) are not inalienable characteristics of small businesses.

Hertz (1982: 426) arrived at similar conclusions, for different reasons. She observed that inherited small business managed by hired managers or ailing small business managed by an official receiver

> ... does not change from a small to a medium business just because the owners are heirs and not the employed manager the case of the former.

It therefore appears that the critical factor is that a small firm should not be managed by many people, irrespective of whether they are owners or not. Managers in this case would include any person who is in charge of a group of workers. Drucker's (1982: 202) qualitative view of the size of a firm, being "as large as the management structure it requires" as seen in section 5.4.1.2.3., though unspecific is probably as true as it was 25 years ago. A behavioural aspects cannot therefore be ignored in developing a small business definition. As Davies and Kelly (1972: 47) have pointed out:

> ... as far as possible analytical and behavioural considerations should be allowed to dictate the terms of the quantitative definition.

Consequently, it was advocated that modification be made of the psychological qualitative requirements of personal management and

management structure to a quantitative criteria of a few managers. The remaining problem would then simply be the determination of the number of managers. This is done in section 1A2.4.

1A2.2.1.4. SUMMARY OF QUALITATIVE CRITERION

It is acceptable that qualitative criteria are regarded to be more reliable and accurate in their description of the small businesses. This is so because the criteria tend to stay with the defined for longer periods of time than the quantitative. This is the major difficulty in applying the later, especially for monetary criteria, as will soon be shown in the next section.

However, the major detriment lies, it has been shown above, in their difficulty of their verification, which relies on the accumulation of data, research and a thorough understanding of the essential components of the defined. Hence very few countries include them in their definitions. But even these countries do not use them in practice or fully utilize them if they do use them. It has also shown how difficult it is to apply such criteria without being biased in excluding some small businesses which qualify. It has been suggested to leave all of them out from any development of a small business definition since they serve no or at most little purpose.

This notwithstanding, qualitative definitions are however helpful in defining the main phenomenon. In addition, one qualitative definition, size of management has been found to be useful even for a small business definition, if it can be

translated into a quantitative criterion. Another important qualitative criterion found valuable in arriving at a suitable definition is that a small firm can be one of a number of establishments forming up an enterprise as long as the size of an enterprise does not go beyond quantitative cut off point.

However, the better approach, for defining the small business organisation, should be one which takes into account the two criteria of

a) the total size of an enterprise (regardless of the number of establishments);

b) the size of management; and

c) the number of employees translated from criteria (a) and (b) as a quantity criterion for purposes of determining an appropriate quantitative cut off point.

Such a measure would eliminate large firms and be more justifiable. However, before developing such criteria, it is now time to evaluate the quantitative criteria. In the process the reasons why other quantitative criteria were determined invalid will be shown.

1A2.2.2. ADVANTAGES AND DISADVANTAGES OF QUANTITATIVE CRITERIA

In addition to the three main qualitative criteria used i.e. ownership, market share and independent management, a number of quantitative measures are also used for definitional purposes and government assistance programmes. A basic distinction between the quantitative criteria used can be human and monetary. Further, the former can be relied upon as a more stable measure. The former can further be categorised into employees, customers,

subscribers or shareholders. The later includes turnover (sales), payroll, capital investment and profit. These serve as indicators for the financial position of an enterprise. The most often used are employees on one hand, and sales volume, profit, assets and payroll on the other hand (Hertz, 1982: 155).

In the study of 72 countries *'vide supra'* conducted by Auciello et al (1975: 3 - 53), 54 countries (75%) had no single measure for the country as a whole. But only 18 had one measure such as number of employees, capital, assets or sales. However, as regards qualitative and quantitative definitions, on one hand, 21 countries (29%) used the former in addition to other measures while only 4 had an exclusive qualitative definition. On the other hand, 65 out of 72 (90%) reported using a quantitative definition. But 44 (61%) used exclusive quantitative definition, i.e. with no qualitative one. Further, simple ratio analysis of the data by this researcher revealed that an equal number of 49 countries used human and/or monetary criteria. However only 11 countries exclusively used monetary criteria. Capital was the most preferred having been selected by 10 while sales was adopted by one. But when all countries who had used monetary unit with or without other measures were considered, 40 countries used capital or assets while 14 used sales.

1A2.2.2.1. ADVANTAGES OF QUANTITATIVE CRITERIA

On the whole, it is preferable to use quantitative criteria as opposed to qualitative. The former are also more appealing in the Zambian case for administrative purposes since they are clear

(since numerical valued are used), direct (for purposes of implementing economic policies) and adaptable (can be applied to different industries) (Hertz, 1982: 157 - 160).

In developing the definition, it should be bone in mind that human criteria are more advantageous than the monetary ones because changes in the later do not interfere with the former. Despite this benefit, they are not the only ones used. This is partly due to the fact that the ultimate purpose of any business centres on monetary values and criteria. The choice of this also depends on the specific purpose of the definition. This could be corporation tax levied on profits, hence requiring a profit criterion; or value added tax, demanding the use of turnover criterion.

1A2.2.2.2 DISADVANTAGES OF QUANTITATIVE CRITERIA

Suggesting to disregard the three main qualitative criteria, may have created an impression that quantitative criteria were perfect, but this is unfortunately not the case. This section, will deal with the general disadvantages. But the next section, due to lack of space, will concentrate on the difficulties of applying three individual elements only namely, employment level and capital in practice in defining small businesses. Objectives for deriving definition will then be set before stating it.

There are two basic criticisms against quantitative criteria. These are ambiguity charged by small business administrators; and inflexibility as implied by the small businessmen. sub-classification of these two, results in four

namely, ambiguity, complexity, arbitrariness and inferiority. The accusation of ambiguity arises due to the great number of criteria and numerical specifications that are applied for defining small businesses. This is particularly true in countries where different thresholds are used to define small business for qualification or exclusion. This leads to the second problem of complexity since the massive criteria makes it very difficult to determine which are small businesses. This therefore robs quantitative criteria of the benefit of deriving clarity and simplicity in identifying small businesses. The final result being that the same small business is considered small in certain situations while it is regarded large in other situations. The SBA for example uses five different quantitative criteria, eight different definitions, and a number of numerical ceilings within each criterion (Hertz, 1982: 182). Recall that confusion and indeterminateness were the basic criticisms of qualitative criteria. So it should not be allowed to happen with quantitative criteria because this state of affairs impedes carrying out administrative functions. Small businesses themselves need to know precisely their correct size and status, which are muddled as a result of the multitude of definitions. Size should not change from one situation or incentive programme to another. A clear picture is important because size is associated with availability of financial resources, production standards and marketing capabilities and ultimately to duties, obligations and benefits. The cynicism is however that countries which have been passive to the needs of small firms and have thus avoided complex legislation elude these kinds of problems.

Besides ambiguity and complexity, another condemnation of the quantitative definition is its arbitrariness as perceived by the affected businesses, either those left out or included. This is however a less serious hurdle since a line has to be drawn somewhere so that it is clear to all concerned. After all this castigation equally applies to qualitative criteria, which are inaccurate in determining thresholds. The only difference is that the former is more open about is and therefore easier to apprehend and detect. The later is more discreet and hence only the most alert perceive them.

The fourth criticism that Hertz (1982: 41) has referred to, which should be considered as a minor point, is that they are regarded to be inferior to qualitative because of ease of application, requiring no special skill, and being in abundant use. This together with 'arbitrariness' attributed to them, '*vide supra*' "renders them inexclusive". Thus Hertz continues that they are used when suitable qualitative ones do not exist, or where the regulator had prior motives for doing so. Contrary to Hertz's assertions, this should, however be looked upon as an advantage instead of a disadvantage. it has been argued above, that simple, easily understandable measures by all the parties concerned are needed. Most small businessmen are not highly educated to expect them to comprehend complex and ambiguous measures.

As a result of these countercriticisms, Hertz (1982: 180) suggested that, '*prima facie*", it may seem preferable to use a combination of quantitative and qualitative to complement the other, thus arriving at a comprehensive definition. She referred

to her finding, in practice, in four countries. (Peoples Republic of China, U.K. and Israel) which used a combination of the two.

These arguments for a combined approach are not endorsed for the reasons already stated above. The end result would still be the same: confusion and lack of clarity which the discussion has been attempting to disentangle. But Hertz's (1982: 180) conclusions are shared when she states:

> qualitative-cum-quantitative definition is an inferior product to the exclusively quantitative one.

Her major dissatisfaction with a combined definition which is shared is that

> ... it cancels these definitions' advantages and sustains disadvantages [in that it] loses clarity, directiveness and adaptability, but retains its ambiguity and inflexibility

1A2.2.3.3. Measurability of the Quantitative Elements of Capital and Employment in Zambia

It should be made clear that not all quantitative criteria are acceptable in this study. However due to lack of space, each individual element will not be dealt with. But all of them will basically be discussed under two major classifications: human and monetary criteria because most arguments *'pro et contra'* would mainly apply to all individual elements that fall under each of these two. Monetary criteria will therefore concentrate on capital while human will deal with employment. Observations on these will be made before stating the definition.

1A2.2.3.3.1. Inappropriateness of the Criterion of Capital in Zambia

SIDO's definition of small scale business, based on capital, was guided by the major argument that Zambia's fundamental problem, as in the case of almost all African countries, is "capital and not labour". It was therefore argued by the UNIDO Senior adviser, Nanjappa (1982: 5):

> that all types of manufacturing, processing and servicing units in various countries may be defined according to their [capital] needs.

Although the argument used is valid and the criteria is also specific, the resulting definition is unhelpful since the criteria used has some basic flaws. The effect has been that it is difficult to implement and administer by SIDO. This is bound to develop into uncertainty, indefiniteness and inequity in spite of the fact that it is a quantitative measure which is supposed to avoid these problems. The major obstacle has been, as is the case with all monetary measures, its inability to withstand longer periods of time as an indicator of financial position and size of a firm.

It is fundamentally for this reason that the use of this criteria is not favoured since it is in effect rendered impotent for administrative purposes and in serving the interests and needs of SIDO's customers - the small businessmen. SIDO's short experiences will help in illustrating the weaknesses of the criteria and the practical problems encountered. SIDO Act does not exclude capital investment on land and buildings, and working capital. Neither does it refer to 'ancillary enterprise'. But in 1983, barely two years after the enactment of SIDO and one year after establishment of the organisation, changes were made, for

administrative purposes to exclude investment on land, buildings and working capital. This was done to limit high capital investment since small firms are assumed not to have high level of investment.

Another illustration will show the ineffectiveness of SIDO's definition. During SIDO's first full year of operation, a total of 15 industrial development projects were evaluated by SIDO itself (1983/84: 8) But only 7 out of 15 firms had capital investment estimates of between K20,000 and K250,000, thus satisfying SIDO's small business definition. The remaining eight had capital estimates ranging between K380,000 and K665,000 (three of these falling in the highest category), thus failing to meet the definition's specifications. The implication is that if the definition had to be strictly adhered to, more than 50% of the firms would have been disqualified.

The upper ceiling was therefore relaxed to include firms of up to K350,000. The purpose was to include reasonably small ancillary firms. By 1987, consideration was being given to raise the upper ceiling to K500,000 (Dhall, 1987: 73) due to inflation. The Act has however not been altered yet. This means that within a period of 5 years, the size of a small firm was altered from K250,000 to K500,000. Note that the actual sizes of firms may not necessarily have increased.

In principle, the need to exclude land, and buildings is supported for two reasons. In Zambia, land is more or less free since it is a freehold from the state for a period of 99 years. However, service charges by councils are exorbitant. The minimum commercial plots cost about K10,000 and as high as K40,000.

Second, the cost of buildings is also astronomically high. A small commercial structure which would cost about K300,000 would be out of reach for most potential small businessmen. Inclusion of these factors would obscure the true value of such businesses.

In fact SIDO, Bankers and researchers have already started showing dissent with the definition, although the arguments differ. But none of the solutions offered so far appears to be appropriate. Recently, in a seminar paper of May 1984, Lisimba (May, 1984: 2), the Director of Administration of Zambia National Commercial Bank (ZNCB), has observed that the definition is unsatisfactory as it relates to capital assets which

> .... quite often do not reveal the correct size or financial position of a firm.

He advocated to base the definition

> ... on turnover and the number of employees and in relationship to its share of the market and the fact that it is managed by its owners.

Kamya and Mbenkele (1982: 189), in their case study of five small businesses also criticized SIDO's definition and decided:

> ... to consider the abundant factor, labour, and the sales volume as well because capital equipment alone may be misleading. A small-scale weaving factory may use capital-intensive technology to improve quality or to minimise the labour costs. ...[In addition, they] considered some qualitative standards such as ownership (individual proprietors), the independence of management, and the existence of a fixed location.

At another seminar, SIDO (SIDO, Sept., 1984: 2) also observed that at current prices, buildings alone for many projects, for example,

> ... would account for a minimum of K200,000 of capital assets less machinery which would take another K100,000.

They argued that this kind of situation leads to an

> ... inefficient bureaucracy where SIDO has to keep on requesting the responsible Ministry to waver the requirement of the law.

It should however be noted that relaxing the upper limits has not fundamentally changed the *'status quo'* of the inherent problems of using capital as a measure. Two questions may be raised. First, what is the purpose of setting a measuring standard which can not be used but is instead altered frequently to accommodate what is being measured? Second, is there a need to have a legal definition which can not stand the test of time or at least a reasonable number of years for purposes of reference?

It should now be very clear that the present definition of small scale businesses in Zambia, while a good step in the right direction by legally defining it, as Hertz (1982: 4-5) would agree, is not suitable for Zambia or for purposes of this research for several reasons. First, as it has been emphasized through out this discussion, a definition for the small firm should have a practical application in identifying those businesses which are dissimilar to others. Yet as seen above, this will not be possible in the Zambian case on a regular basis. It would also be useful to financial houses who at the moment are doubtful of the adequacy of the present one in apprehending and determining the correct size of such businesses. Second, a consistent but more stable measure is also required in order to allow the studying of the economic changes in the small business structure. This is imperative in order to determine the effectiveness of the small business policy in future. Frequent changes in the unit value due to inflation will result in confusion when undertaking such studies.

Although it is sometimes argued that continuous reappraising of the criteria can replenish the reliability, this is not easily achieved in juristic definitions set by legislations. These take considerable periods of time before any action is taken and any changes effected (Hertz, 1982: 157). This is truism even in non-legal, non official definitions. In the case of Britain, for example, the monetary definitions set by the Bolton Committee in 1971 were not reviewed until 1978 by the Wilson Committee (1979: 43).

It is therefore suggested that since the Zambian definition does not serve the purpose it was set for or any at all for that matter, it should be changed by dropping the criteria of capital.

1A2.2.3.3.2 Irrational High Limits of the Criterion of Employment

This section is intended to show that although the criterion of employment is appropriate, it has been used incorrectly in the definition of small firms perhaps unwittingly. An attempt will be made by referring to experiences of other countries such as Britain and the U.S. to show that the use of high limits of say 1,000, 500 or even 200 employees in small firm definitions is inconsistent to the very phenomenon of small business. Consequently it renders such definitions futile. The result is that the actual small firms can hardly be identified or benefit from government programmes intended for them. This is so because virtually all firms, except the largest 5-10% , are included. Hence, it should not be surprising to read in many literatures their conclusions, for example that 99% of all firms are small when they in fact mean that the largest, dominant firms are 1%! The advantages of the criterion of employment will be helpful in deriving the definition.

In the case of Britain although the level of 200 employees appears to have been accepted as the cut off point for the manufacturing sector, this magic number, which has now been accepted as having been set on the higher side, was given to the Bolton Committee (1971:1) in its terms of reference. The other statistical limits it derived are said to have been set on the lower side. The Bolton Committee (1971: 2-3) admitted this when it said that these were

> more or less arbitrary. ... We believe that we have set our statistical limits on the low side ...

But added that since the majority of firms in the surveyed industries were classified as small (the proportions ranged from 77% in the wholesale to 96% in retailing), the exact definitions chosen did not matter so much for the purpose of general analysis.

It is not the intention to extend this discussion of statistical criteria to other sectors in detail for lack of space and since the main concern is with manufacturing. But it is worth noting that the inconsistency, ambiguity and uncertainty of and disagreements over the criteria used is also applicable to these other sectors. Bannock has for example criticised cut off points in the case of Britain. He has argued, for instance, in the case of 5 vehicles or less for the transport industry, that first, although a company with 10 vehicles could be considered a large firm in 1963 (the base year of Bolton Committee's study), such a 'large' firm could still have a small share of the national market (though it could be argued that the local market is the most relevant). Second, a much larger firm than the previous one could still be managed by its owners in a personalised way, which would tend to qualify it for a small firm. Third, in terms of capital and employment level, such a larger firm could still typically be very much smaller than the average manufacturing concern employing 200 persons. Yet the later is supposed to be a small firm while the former should be a large firm! The first two points raised also confirm earlier criticisms regarding contradictions that are caused by using too many criteria. As regards the third issue, supporters of these definitions may counter argue that Bannock's discussion did not distinguish between industries, which was one of the Committee's basic

concern. It nevertheless shows the victimization that occurs when for instance a transport firm with, say 7 vehicles is denied facilities available to a 'small' manufacturing firm employing 200 people. This is basically a problem arising from the use of different criteria for different sectors since the Committee (1971: 1) believed that

> ... a small firm could not be adequately defined in terms of employment, or assets, turnover, output or any other arbitrary single quantity, nor would the same definition be appropriate throughout the economy

This state of affairs of too many and different criteria for various sectors, has therefore led to a confused, indefinite and contradictory and therefore unhelpful situation.

Coming back to the employment level of 200, it has been observed that although this magic number, given to the Bolton Committee (Bolton, 1971: 1) when it was appointed, appears to have been accepted as the cut off point for the manufacturing sector, it was set on the higher side. But it's continued use has often been justified on two grounds: economies of scale related to dominance as seen and skewness of the manufacturing sector.

1A2.2.3.3.2.1 Economies of Scale

As regards the first point on the economies of scale, the importance of technical and market economies of scale and the relationship to size, as presented by Steindl, was seen in an earlier discussion, in appendix 1A1.2. A small scale business is characterized by absence of economies of scale. The question therefore that arises in distinguishing between small and large

firms according to this economic concept is to determine the level at which these economies of scale arise. Davies and Kelly (1972:8) in their research report for the Bolton Committee stated in the following manner when discussing the importance of economies of scale in relation to small firms:

> In a large number of industries technical economies of scale cannot be fully exploited in firms employing fewer than 200 persons. Moreover, the minimum size of firm necessary to take full advantage of economies of scale in research and development, marketing, finance, and even management, also frequently exceeds 200 employees.

This argument however assumes that all firms beyond the cut off point of criteria in each industry experience economies of scale. Yet some may not. Second, it also assumes that the same degree of economies of scale exist in all firms. Yet the degree differs from industry to industry and within an industry from one firm to another. Still more, within the same firm, this can still differ depending on the size of the firm and plants utilised. There seems therefore to be little relationship between employment size and economies of scale. A highly capital intensive firm, for example employing 30 people, can still achieve economies of scale in a large, high technological and automated plant. The third point is that economies of scale can indeed be obtained even in small firms by removing those constraints that inhibit their existence. Professor Sargant Florence (1948: 52-53) for example argued that the locational economies of scale of bulk buying, specialist and machinery utilisation, and auxiliary services such as repairs and tooling can also be obtained by small firms (see chapter 4.5).

Hence, it appears that economies of scale may not necessarily be a proper conclusive technique of distinguishing

between small and large. This is indeed so since small firms can also obtain them. Further, the degree of economies of scale can be arranged on a continuum from the smallest to the largest. This would appear to be tautologous to the concept of business organisations which start from the smallest to the largest. Hence this would be tantamount to failing to define small firms. Third, the previous point is especially true since in practice, it would not be easy to identify and determine which firms have achieved the economies of scale to qualify to the small business sector. What is required is a simplified and easily understood practical method.

1A2.2.3.3.2.2. Skewness of the Small Business Population

The second reason for the perpetuation in the use of the Magic figure of 200 is skewness. This argument is based on the fact that the 'small business population of 200 and less' is skewed to the right. That is there are fewer large concentrated firms such that even if the figure was reduced, to say 100 employees, that would not alter the results and main conclusions. Curran (1978:· 6) also referred to similar observations by researchers. He stated that the total percentage employed in small firms employing less than 100 is 21.9% while 100-199 category is 7.6% for a total of 29.5% employed by firms, in size, of less than 200. Their contribution to Gross output is 17.6% (13.0% for 1-99, and 4.6% for 100-199). The figures for the firms employing 200 and more were 70.4% and 82.4% £41.790 for employment proportion and output respectively.

It has also been shown (CBI, Sept., 1968; Swan, 1971: 4-5; Davies and Kelly, 1972: 10) that in Britain between 1930 and

1963, the number of small establishments declined from 181,000 to some 82,000 while the proportion of small establishments dropped from 98% to just over 91%. Dewhurst (1980: 1-2) has added that the share of employment declined from 44% in 1924 to 31% in 1963 in establishments although the decline was lower for small enterprises as it fell to just under 20%. If the proportion of less than 200 is broken down further, the result is that 73% of all manufacturing firms employed 50 or less people in 1958. The percentages were 72.8% of those employing less than 100 people in 1961 and about 91% of those employing under 200 in 1958 and 1963. This is a difference of 22% between firms employing less than 50 and those employing less than 200! Corresponding figures for Norway for example were 94% under 50 employees and 99% under 200 workers in 1961.

The Business Monitor (1977: 42) also shows that there were a total of 90,282 enterprises employing a total of 7.1 million people. Of these, 86% (78,268) fell in the small size category of less than 50 workers employing 10% (737,900) of the total. As regards the less than 100 size category, 92% (83,474) were small employing 16% (1,095,000) while the less than 200 employees accounted for 96% (86,211) of all enterprises and employed 21% (1,470,100) of the total. *'Nota bene'* that these are differences of 10% (96% - 86%) between the less than 50 and less than 200 employers.

Ganguly (1985: 8) gives an international comparison which shows that the small business share in relation to size structure is very high, accounting for a minimum of 94% in the U.K. to as high as 99% in Switzerland, Japan and Italy (see table 1A2.2).

Although it cannot be disputed that the structure of the manufacturing sector is skewed, the assertion that lowering the employment level would not change the results and conclusions is however questionable for five reasons. First, this assertion further demonstrates earlier observations that most small business discussions are basically concerned more with distinguishing between the few large concentrated firms and the rest rather than with distinguishing between large and small firms. The fact is that although there are fewer large concentrated firms, there are a lot of firms employing for example between 50 and 200 employees, which though not dominant, may be large.

Second, inclusion of this large, minority or cream, though non-dominant group, in the small business field gives false impressions as to the numbers and performance of small businesses. If 200 employees was taken as the maximum cut off point for small firms in the manufacturing sector, this would practically include all firms except the dominant ones. This has been the case so far in small business discussions.

Third, although there is little difference between less than 200 and less than 100; and also less than 100 and less than 50 employee categories, there are certainly visible differences between less than 200 and less than 50 employees groups. There is certainly a difference of about 22% between saying that 73% of the manufacturing business population is small and stating that 91% of the firms are small! In addition, A contribution of 21% to employment if the cut off is 200 employees compared to 10% if cut off is for example set at 50 employees is a significant

difference of 100%!

Fourth, another disagreement relates to receiving benefits from government programmes. In practice it is this same privileged 'dominant' group included in the less than 200 of the small business sector which may get more benefits. They are able to meet the conditions laid down more easily than the very small firms for whom these programmes are initially intended.

The fifth dispute with skewness is that average establishment of 88 persons (Davies and Kelly, 1972: 10) is a distortion of the facts using statistical jargon because it is conceded that the majority of these businesses are very small, each of which employ few persons. Hence, the average is not the appropriate measure as the range of the businesses population is too wide. It includes very few firms but which employ large numbers of persons as well as many very small firms employing very few people. The average does not therefore represent the normal behaviour of the firms.

In an effort to determine whether the Bolton cut off point of 200 employees for the manufacturing firms was still valid in relation to market share, ownership and management in a personalised way, and independence, the Department of Trade and Industry in U.K. has recently concluded (Ganguly, 1985: 18) that for the manufacturing industry as a whole, the cut off point was still the most appropriate. It was however found that the cut off levels could be as low as 100 employees for such industries as paper, printing, publishing, leather, timber and furniture or as high as 500 employees for the food, drink, tobacco, chemical, electrical engineering, shipbuilding and vehicle industries.

Ganguly (1985: 11-12) also recently attempted to test the validity of the 200 employees cut off level in the U.K. He found

that the percentage of employment differed significantly from industry to industry within the manufacturing sector. In 1978, the enterprises with less than 200 employees, accounted for 23% of employment in the manufacturing sector. But could

> be as little as 7% of employment as in the vehicle industry, or as much as 81% as in the leather goods industry.

He therefore admitted:

> It seems unlikely that when considering a specific manufacturing industry in the U.K., the 200 employee cut-off level ... necessarily pinpointed, in any meaningful sense, the small firms sector in the industry.

Surprisingly, but also interestingly the average employees were 66 per establishment for U.K. When compared to other 11 countries, the highest was 99 and the lowest was 8. What is most astonishing is that instead of accepting the fallacy of the 200 employee limit and proposing a different definition, Ganguly (1985: 18) concluded:

> ... the 200 employee threshold remains the most appropriate for the U.K. manufacturing sector as a whole. Upper limits of 100 employees and 500 employees might be more consistent with economic concept of small firms in certain industries.

In spite of Ganguly's conclusions, It appears that the use of a wide range of statistical data to derive an average is incorrect since outliers may greatly influence the average. A median or a quartile would be more appropriate since it would give the employment level of an average firm. Erickson and Nosanchuk (1982: 36-37) have stated that the mean is not resistant, meaning that

> a few wild observations or errors can affect its magnitude, dramatically.

Table 1A2.2 Small firms' share of total number of manufacturing establishments (in relation to the size structure of the industry)

U.K. and other countries

Country	year	Manufacturing establishments: total (000)	Manufacturing establishments: small firm share %	Manufacturing employment: Total (m)	Manufacturing employment: No. of establishments per 100,000 employed	Manufacturing employment: Average no. of employees per establishment
Austria	1980	6.5	66	0.61	1 070	94
South Africa	1976	15.5	91	1.36	1 140	88
Germany, Fed Rep	1975	93.1	93	7.46	1 240	80
UK	1976	108.0	94	7.11	1 520	66
United States	1977	350.8	94	18.52	1 890	53
Canada	1976	32.0	95	1.70	1 880	53
Australia	1976	21.5	95	1.15	1 870	53
Norway	1979	13.2	98	0.37	3 570	28
Switzerland	1975	62.7	99	0.95	6 600	15
Japan	1976	744.3	99	10.88	6 830	15
Spain	1976	164.6	97	2.30	7 170	14
Italy	1971	626.5	99	5.30	11 850	8

Notes: 1) Reduced small firms coverage in Federal Republic of Germany after 1975. Australian figures relate to enterprises.

2) small firm defined differently in each country.

Source: Ganguly, 1985: 8

In any case, there is certainly a world of difference between employment level of 200 used as the cut off point and 66 persons found as the average by Ganguly and even the 88 workers estimated by Davies and Kelly. In fact, in the same study of Ganguly, it will have been noticed that the highest average was 94 employees for Austria while the lowest was 8 for Italy, for the 12 countries he compared. What is most fascinating for purposes of this study is that 60% of the countries (8) had an average of 53

employees or less per establishment. In addition, 41% of these (5) *'vide supra''* table 1A2.2 had an average of below 30 employees. Other studies disagree with Gungly's conclusions, but confirm this study's disagreement that the limits of 500 or 200 are too high (Storey, 1982, Leyshon, 1982, Bannock, 1976: 14; Curran, 1976: 4-6). Hertz (1982: 435) renounced the determinants of 200, 500 and 1500 employees of the UK and the US definitions, arguing that these

> ... have been rejected as unrealistically high for the definition of small business.

It can therefore be argued that instead, firms of 100, 75 and particularly of 50 employees and less have more in common than firms with 200 employees or more. Dewhurst (1980: 2) reported that the Economic and Social Committee of the European Economic Community referred to number of employees as a definition in as a definition in member states since in general

> the majority view is that on average undertakings with up to 100 employees are small undertakings...

Recall an earlier argument (section 1A2.2.13) that personalised management, meaning owner must manage, though helpful in deriving a small business definition, is not a precondition for a small business to exist. It was further stated that the qualitative behavioural factors, especially management structure and limited size of the number of establishments forming an enterprise (see section 1A2.2.1.2 which discussed independent ownership) are important and should therefore be considered in developing a quantitative definition of small business. These views were also proposed by writers as Drucker (1962: 202) and endorsed by researchers such as Davies and Kelly (1972: 42). If therefore Drucker's view that a firm is "as large

as the management structure it requires," strongly supported by this research, is accepted, it should follow that a firm employing 200 or more people is not a small business. Davies and Kelly 1 (1972: 4 & 51) also admitted when they said:

> By such criteria, a manufacturing firm employing 200 persons is not small as some functional specialisation begins to emerge in firms employing more than 75 persons.

These features have been described by Atkins and Partners (1969: 231) in their study of the wool textile industry. They found that firms employing 33 or less had characteristics of a typical small business firm. However for the next size category of between 33-100 employees:

> ... many of the characteristics can still be found. But generally the task of management must be shared, and a typical establishment of 75 persons has 12 to 15 non-production employees. [Beyond 100] there is a need for formal structures and systems with clearly defined roles and relationships.

This need for structured management for large numbers of employees of about 200 has been confirmed by Hertz (1982: 111) as discussed in section 1A2.2.1.3. Swan (1971:42) in his study of management attitudes and techniques came to similar conclusions. That the average number of employees, excluding managers and supervisors was 211 for size of firm of 100-499 employees. But it was 54 for firms employing 20-99

Simple statistical analysis by this researcher of all the definitions presented in the study of 72 countries by Aociello et al (1975: 3-53) indicated that the limit level of 200 employees was not popular (even in practice) as only 4 countries used it. Again only 5 used a limit of 500 while one (the USA) used a limit of 1,500 employees in addition to 500 in another definition. The distribution of the other limits of employees were: 100, 50, 25, 15 employees for 6, 16, 7, and 12 countries respectively. Some

countries such as Honduras and Jodarn had as low as 5 or less (1975: 59-60).
Besong (Nov.,1978: 11), using an average of 25 employees for small business definition, in his study of developing countries with particular emphasis to Cameroon, reported at the end of his study that many small businesses in developing countries are "owner managed" which employ less than 5 people while the average has been put at 2-3. The average for Sierra Leone was 1.9 rising to 3.5. For rural Western Nigeria, Aluko (1973: 9 cited in Besong, 1978: 11) reported the average number of employees to be 3. Besong also referred to an ILO report of 1970 which found that for Western Nigeria, the mean was 2.6. Kilby (1962) also reported an average of 2.7 workers in Eastern Nigeria.

It is clear that for the majority of developing countries, the average number of employees in a small firm was below 50. Evidence has also shown that for many developed countries, the average number of employees per small firm is below 75 (the proportion was 75% for countries shown in table 1A2.2). The Bolton Committee (1971: 4), for example, acknowledged:

> It is worth emphasizing here that a substantial proportion of the enterprises with which we are concerned [sole proprietorships, partnerships and 'close' companies i.e. controlled by five or fewer persons] are essentially forms of self-employment, where employees other than the proprietor are members of his family.

The Committee (1971: 3) then admitted that the estimated average employment of

> 25 persons per small firm [was] very much lower than the 200 maximum chosen in the manufacturing sector.

It is therefore not surprising that at the end of his study, Curran (1978: 6) was courageous enough to also admit that he had become convinced that:

> by the time a firm employs nearly 200 people, it has more in

common in some ways at least, with a large firm rather than the small firm employing say 50 people.

The fundamental question is: in the light of this overwhelming evidence is it therefore reasonable to refer or continue referring to a business organisation with 200 or 500 employees as a small firm with 'family members'? Since the average employees in real small firms is far much lower than the 200 cut off level, is there any valid and rational reason for not reducing the employment limit of a small firm to reflect the actual small firm instead of adopting the higher limit dogmatically? It is for the reasons discussed above that led Curran (1978: 4-8) to be highly critical when he concluded that although the Bolton Committee has been influential in guiding the thinking towards a consensus, at least in Britain, such a compromise has been due to an

> Act of faith that the Committee must have had at least some reasonable grounds for the figure chosen and to the need of increasing comparability [of research findings].

1A2.3. OBSERVATIONS AND CONCLUSIONS

'*Ad summum*', It has been shown '*sine dubio*'' that the present definitions, both qualitative and quantitative are misleading, contradictory and inadequate.

Evidence has also supported the claim in this study that in general, qualitative criteria are inferior to quantitative for achieving precision and conformity. They are indeterminable, confusing, inflexible and hard to implement since they are unspecific and not easily verifiable. Further, it has been indicated that qualitative definitions and in particular the

scientific definitions, while useful in developing a definition, are not complete in themselves. They are unspecific, vague and less helpful for research or administrative purposes. Despite these weaknesses, it as been accepted that qualitative definitions can be utilised as a framework and a theoretical background when defining the main phenomenon, business. Since small business is a sub-group of business, it has to comply with the definition of a business. Hence, more specific quantifiable criteria are required when defining sub-groups of a phenomenon such as small business. Therefore two qualitative criteria size of management and size of establishments forming an enterprise have been shown to be useful if they can be translated into a quantitative criterion.

It has also been attested that not all quantitative criteria are popular in practice or beneficial in developing a small business definition. It is therefore essential to be prudent by choosing 'certain' instead of 'uncertain' quantitative criteria. This is particularly true in the case of monetary criteria which are not helpful in practice. They are unstable, non durable and therefore require frequent changes to reflect inflationary changes, but these are not easily attainable. Legal definitions are particularly prone to lagging behind time, thus rendering them obsolete sooner than they are defined. They can therefore easily lead to imprecise estimations. They are also subject to interpretations.

It has been shown that the Zambian definition which is based on capital is not suitable. It has already failed to serve the purpose of identifying the defineds due to inflation. The wisdom

of adopting a dogmatic, false *'ne plus ultra''* attitude by those concerned with SIDO's small-scale business definition is therefore questionable since it will not be helpful. This researcher has been convinced by strong evidence available that a better definition is needed, immediately.

It has been verified that the human criterion, especially employment is widely practised and is more beneficial since it is precise and more stable. But overwhelming evidence has demonstrated clearly that the present limits of 200, 500 or more are too high. These could have been influenced by the belief that market share of a small business should be small relative to the industry. Hence, perhaps the need to set size of a relatively high level of number of employees. But once the criterion of market share has been shown to be inappropriate, the doctrine of *'falsus in uno, falsus in omnibus'*, should apply and hence, the high level of 200 or more should also be rejected. Therefore, employment levels of 75, or especially 50 and below correctly represent the small business sector these firms have more in common than with firms of large size.

1A2.4 SMALL SCALE BUSINESSES DEFINED

The concern in this section is fourfold:

1) presenting the objectives for determining the definition;
2) providing a framework for the most appropriate criteria selected for use in defining a small business;
3) deciding on the definition by deciding on cut off points for selected criteria;
4) presenting brief justifications for the cut off points;

1A2.4.1 OBJECTIVES FOR DETERMINING THE DEFINITION

It should be emphasized that the overall objectives in deriving a definition should be selecting precise, durable and easily implemented criteria. This definition should also reflect the normal size of the small business field. The definition should fulfil the following purposes:

1. to identify, foster and encourage the development of small businesses;
2. to provide uniformity thereby allowing a unit to be able to obtain assistance of various kinds from different agencies;
3. to enable SIDO to administer special assistance programmes more easily;
4. to enable measurement of changes in the small business sector;
5. to allow SIDO to measure the effectiveness or success of policies relating to small businesses;
6. to allow academic comparability of data locally and internationally.

1A2.4.2 FRAMEWORK FOR THE MOST APPROPRIATE CRITERIA

The three typology was used in arriving at a framework for the definition. It is very clear that qualitative definitions though very valuable in developing a framework and theoretical background to small firm definition are not specific enough for adopting in small firm definition. But size of the number of establishment and size of management were found to be the fundamental criteria in deriving a small firm definition. Drucker's simple view that a firm was as large as the management structure it requires i.e. size of management, was the corner-stone in developing the definition. In reality all scientific definitions and qualitative definitions used by different countries boil down to this simple but critical factor. This is true despite that different terminologies are used such as self-employee, owner does the work by himself, personalised management, independent management, not forming part of another large organisation, small market share, not predominant etc. Detailed analysis of each of these show that without exception, each hinged on the management. Deriving a definition based on size of establishments which form an enterprise (or not forming part of a large enterprise) and management size required transforming these two into quantitative criteria.

Quantitative criteria were determined to be valuable in identifying small firms since they were specific. Therefore, in addition to the two transformed criteria, a third criteria determined to be the most appropriate among readily available quantitative criteria was employment. Monetary criteria was not considered because they do not stand the test of time particularly in developing countries such as Zambia.

Three quantitative criteria therefore formed the basis for the definition:

a) size of establishments forming up an enterprise which should not result in a large enterprise;

b) management structure or size of management;

c) number of employees.

1A2.4.3 DETERMINING CUT OFF POINTS FOR THE DEFINITION

It has been clearly shown that employment level of 200 and more has been accepted as being too high (Bolton Committee, 1971: 2-3; Storey, 1982, Leyshon, 1982; Bannock, 1976: 14; Curran, 1978: 4-6; Hertz, 1982: 435). It has therefore been suggested that firms with more than 100 employees are not small firms (Dewhurst, 1980: 2). But a firm employing 75 persons and less is a small firm since functional specialisation and structured management may not be needed (Bolton Committee, 1971: 3; Davies and Kelly, 1972: 4 & 51; Atkins & Partners, 1989: 231; Swan, 1971: 42; Beesong, 1976: 11; Curran, 1978: 8). The practice of an overwhelming majority of 86% (62 out of 72) of countries which use employment criteria has been to set limits of 100 and below (Auciello et al, 1975: 3-53).

Research evidence has also shown that the number of managers needed to manage a small firm, i.e. up to 100 employees is about 3 persons or one tier management structure regardless of whether they are owners, managers or supervisors (Swan, 1971: 41-43). Therefore, research evidence indicates that the out off point for the size of management for a small firm is equal to 3.

Biblical testimony (Exodus 19: 13-26), Management writers (Drucker, 1982: 202) and researchers (Hollander, 1967: 4-5; Davies & Kelly, 1972: 42; Atkins, 1969: 231; Hertz, 1982: 111) have all shown that a person's span of management is limited. Formal structured management is therefore required over a certain size of an organisation. The normal span of control or management has been determined to be about 15 employees for lower levels (Hicks, 1974: 145-146; Koontz & O'Donnel, 1978: 177-178; Swan, 1971: 41-43).

Therefore since the size of an enterprise is as large as the size of management it requires, to determine the size of a small enterprise based on the number of employees (regardless of the number of establishments forming up the small enterprise), requires multiplying the number of managers per small firm by the number of persons a manager can handle. This gives 3 x 15 = 45 or 50 to the nearest ten. The figure of 50 takes into account "not belonging to a large enterprise" since the total number of employees in all establishments should not exceed 50.

Therefore in order to meet the objectives and at the same time avoid the disadvantages attributed to qualitative factors, but gain from the requirement of small management structure and quantitative advantages, a small business should be defined *'a fortiori'* positively as:

> A commercial organisation that is managed by at most three managers, or having not more than 50 workforce including owners, family members or part-timers in all establishments belonging to an enterprise.

1A2.4.4 JUSTIFICATION FOR THE CUT OFF POINTS

The justifications have already been developed and presented throughout our discussion. However, briefly, we decided to use one determinant: number of managers or employees to avoid falling into the same confusions, intricacies inconsistencies and inequalities as in previous definitions. A small business has therefore to satisfy only one of the criteria regardless of the industry. This was done first, to avoid situations where actual small businesses may be excluded while other similar small businesses are included. Second, it will also eliminate situations where the same firm is deemed to be small by meeting one or more of the conditions, but is disqualified on some other grounds, if several contradictory requirements were needed. Third, it however removes situations where actual small businesses are excluded if one criterion only was used, without an alternative, as for instance in the case of labour intensive industries if labour was the only criterion. If number of managers only was used, small firms with say 30 people, but being managed by 4 managers may also be unfairly eliminated.

The criterion of three managers because small business is characterised by the concentration of management in a few hands regardless of whether these are owners or hired managers. Since the structure of management basically determines the size of a firm, a small firm should therefore have few managers. This is normally a one tier management structure, with the owner as the Chief Executive and about two helpers. If the normal span of management is taken to be an average of 15 persons, it follows that about three managers would be adequate to manage a small

business of about 50 persons. The Bolton Committee's (1971: 7) findings also indicated that 66.7% of the firms were managed by two people while 96.6% were managed by up to five people who in the case of Britain happened to be owners.

The limit of 50 workforce including owners or relatives or part-timers makes sense because research evidence has indicated that there is a significant difference between firms of not more than 50 and firms with 100 to 500 people. Research evidence showed that the actual number of employers for a small firm has been 50 and 75. Aociello et al.'s study (1975, 3-53) also showed that out of 51 cases where the criteria of employment was used, 35 of these or about 70% used 50 employees or less. An upper numerical threshold of 50 or less employees is preferred to single numerical determinants (e.g. a firm should have 50 employees), or double threshold criteria (e.g. a small firm should have between 10 and 50 employees) because it is the least arbitrary. In addition the number 50 is easily comparable to others instead of for example 47.

Chapter 1 Apendix 3 - Students' Marxism Tendencies: Principal's Memo on the death of President Brezhnev

THE UNIVERSITY OF ZAMBIA AT NDOLA

MEMORANDUM

From: The Principal

To: The Student Community

Date: 15th November, 1982

Subject: NON-ATTENDANCE OF CLASSES ON THE OCCASION OF THE DEATH OF PRESIDENT LEONID BREZHNEV OF THE SOVIET UNION

I have decided to write to you in my capacity as the chief academic and administrative officer responsible, according to the University Act of 1979, for the day-to-day running of this constituent institution because of my increasing concern at the creeping tendency on the part of the student body, either in the name of UNZASU or that of student welfare, to usurp the authority of the University Council, the University Senate or the University Administration. The latest manifestation of this creeping tendency is the unilateral decision taken by the student body at this campus on 12th November 1982 that there would be no attendance of classes in memory of and out of respect for the death of President Leonid Brezhnev.

There is no doubt in anybody's mind that a great man has died. There is also no doubt that the great man who is no longer with us was a distinguished latter-day architect and pillar of Marxism-Leninism. There can be no doubt, too, that the entire international community recognised the late President Brezhnev as an outstanding statesman and a world figure of rare distinction and incomparable stature. President Brezhnev, it is universally acknowledged, had contributed in his life-time in no small measure to the construction of our universe as we know it today. Because of all this there can be no doubt and no debate that he deserves honour, recognition and special last respects following his death.

However, to recognize and acknowledge the attributes of this great man and to desire a fitting remembrance of his contribution and international stature is NOT a sufficient cause nor a sufficient condition for students at this campus to disregard the authority of the University Council, the University Senate and the University Administration by proceeding to take the law into their own hands as regards the attendance of classes. I myself doubt that, were this great man to return to life so that you as students could consult him on the action you took in his behalf, he would agree that the fitting way to pay last respects to him is to engage in acts of anarchy and total disregard for good order and the rule of law. He never wished this in his life for his country and one cannot say that he would have wanted this for the University of Zambia. President Brezhnev was not himself an anarchist and at no time during his life did he promote or encourage disrespect for the rule of law in his country or in the world as a whole.

It may be that you looked upon your decision not to attend classes on Friday, 12th November, 1982, as an admirable act of student dynamic activism and as a way of symbolizing and demonstrating solidarity with the socialist revolution, but, I am afraid, I find in your action a demonstration and manifestation of immaturity, irresponsibility and misdirected dynamism. Maturity, responsibility and properly directed dynamism would have demanded of you a different approach. It has to be specially emphasized here that only the Vice-Chancellor or the Principal, as the chief academic and administrative officer responsible for the day-to-day running of this campus, has the authority to allow classes to go on or not. This being so,

a more mature and responsible approach to what you did should have required you to make the necessary representations to my office for orderly arrangements to be made for the purpose of giving due honour to the death of President Brezhnev. Only after and if it had been agreed between you and my office that classes be cancelled should you then and only then have abstained from attending classes. Your action amounted to a serious contravention of the University Act and you were clearly in breach of discipline.

At this stage it is you who are the students. It is you whose single most important mission at this point is to learn. It is you therefore who should put a special premium on learning. If learning is important to you, as I believe it should be, I do not see why you could not have devoted the whole of the following Saturday and Sunday, 13th and 14th November, to the memory of President Brezhnev. Is the only way the death of President Brezhnev could have been honoured fittingly by staying away from classes and in an unauthorized manner? Is the student body incapable of conceiving of more appropriate or positive ways of respecting great men's departure from this world other than by staying away from classes? If others in the nation, peasants and workers alike, resorted to spontaneous declarations of unauthorized holidays, what would be the consequences for us all?

I shall not on this first occasion be tempted to take appropriate disciplinary measures. Instead I have elected to offer only timely counsel. Next time it will be a very different matter.

Mubanga E. Kashoki
PRINCIPAL
UNIVERSITY OF ZAMBIA AT NDOLA

c.c. Chairman, University Council
c.c. Vice-Chancellor
c.c. Deputy Vice-Chancellor
c.c. University Secretary
c.c. Principal, Lusaka
c.c. Registrar, Ndola and Lusaka
c.c. Dean of Students, Ndola

MEK/bmc

Chapter 1 Apendix 4 - Students' Marxism Tendencies:
Principal's Memo on the death of a University Student

THE UNIVERSITY OF ZAMBIA AT NDOLA

MEMORANDUM

FROM : The Principal

TO : The UNZASU Caretaker Executive Committee

SUBJECT : NON-ATTENDANCE OF CLASSES ON MONDAY 11TH FEBRUARY 1985

DATE : 18th February, 1985

I wrote to the entire student body for the first time on the same subject on 15th November 1982. I wrote for a second time on 9th February, 1984 to individual members of the UNZASU Interim Executive Committee informing them of their suspension from the University as well as the suspension of the activities of the UNZASU Interim Executive Committee for the rest of the academic year as a result of the part they played and the initiative they took in declaring an unauthorized holiday on 9th February 1984. I write to you for the third time because it is apparent that your memories are short, but, more important, because a cardinal point needs to be reemphasized.

It seems to me that judging from your unauthorized stay-away from classes, on Monday 11th February 1985, an elementary but important point has still not been fully appreciated by the student body, namely that in the management of this University the authority to allow classes to go on or not does not reside in UNZASU but in the University Administration. It is only the University Administration that has been empowered by the University Council to administer matters of this kind. Therefore, that you as the Caretaker Executive Committee prevailed on the rest of the student body not to attend classes out of respect for the late Mubiana S. Katundu, who died suddenly on Sunday 10th February, 1985, without any prior consultations with or permission from the University Administration represents a reprehensible departure from conduct expected of a mature or responsible student union. I have stressed in the past, and I do so again now, that it is utterly wrong for you and others in the student union to wallow in the belief that UNZASU is supreme over the University Council, the University Senate and the University Administration. UNZASU, like the University of Zambia and Allied Workers Union (UNZAAWU) and the Senior Staff Association (an association representing the interests of the academic and senior administrative staff), acts only as an important supportive agent in the overall administration of the University, but it has no mandate to usurp the authority of the University Council or that of the University Senate or the University Administration.

We are all profoundly saddened by the sudden departure from this world of Mubiana Katundu, a young man hardly in the prime of his life. But this event, tragic as it is to all of us, does not give you any legitimate reason to take the law of the University into your own hands by declaring unilaterally an unauthorized stay-away from classes. This has not happened in Lusaka where the history of our University is longer than is the case at this campus. In Lusaka students have always responsibly approached the Dean of Students on sad occasions of this kind to agree on the procedures

to be followed. This is what is required of all responsible leaders. There must be order in any society, and the University is a society - a community of people.

Workers have died while in the employ of this University. But at no time has UNZAAWU, without any reference to any other authority, asked University unionized staff not to report for work. If UNZAAWU or any other workers' union resorted to this kind of act, the result would be total chaos and paralysis in this country. Fortunately for this country, the ZCTU and its affiliated unions have exercised enough responsibility and maturity not to resort to this kind of social behaviour. They always act within the norms and parameters of accepted industrial conduct. This is the least one can expect of a student union that prides itself on being managed by a responsible and mature Executive Committee.

What you did deserves the same kind of disciplinary measure as I applied to your colleagues last year. I refrain from doing so at this time only because the death of a fellow student made you act out of understandable emotion. I do so also because I am aware that some of you are deliberately intent on provoking a situation so as to create a crisis at this campus. I have no intention of furthering these movives. You will therefore not be made to appear as victimized heroes in the eyes of your fellow students. I intend to help you graduate. Thus, no disciplinary action will be taken against you at this time.

However, you are hereby given a timely, serious warning that should you be found in future to have associated yourself with disruptive actions contrary to the prevailing rules and regulations as promulgated by the University Council, you will be liable to very serious disciplinary steps. It is my hope that you will conduct yourself from now onwards in accordance with the rules and regulations of the University.

Mubenga E. Kashoki
PRINCIPAL

c.c. Vice-Chancellor

c.c. University Secretary

c.c. Registrar

c.c. Deans, SBIS and SES

c.c. All heads of academic departments

c.c. Dean of Students

c.c. Parents/Guardians

MEK/bmc

CHAPTER 2 APPENDIX THE THEORY OF ENTREPRENEURSHIP: THE MOTIVATION OF ENTERPRISE MAN

2A.1 INTRODUCTION

This chapter presents the debate on entrepreneurship theory. It is the underpinning factor in understanding the process of germination or increasing entrepreneurs by policy makers who are concerned with small businesses.

The meaning of an entrepreneur is first defined. Historical background to entrepreneurship is reviewed. This is followed by a discussion of entrepreneurial function. The four current approaches to understanding entrepreneurship: The trait, psycho-dynamic, social development and ohell's models are then discussed. The influence of one element of the social development model (management education and training) on increasing entrepreneurs is then discussed. The concepts of management education and training would be instrumental in explaining difficulties and available opportunities in encouraging SBIS graduates in taking up business formation for their career.

2A.2 DEFINITION OF AN ENTREPRENEUR

Before progressing further it is necessary to define who an entrepreneur is since the definitions used by economists and business sociologist greatly differ. This chapter is not intended to provide detailed explanations of either. Discussions of the entrepreneur under the economic model is available in Hebert (1982 cited in Highley, Nov., 1987: 1) and the sociological and psychological approaches in kilby 1971 (op.,

cit.,). Chell (1984) examined some of the difficulties associated with the socio / psychological schools of thought from a more recent stand point. These will be addressed to later in section 2A.5.4. For purposes of this study an entrepreneur is (Gray, 1987: 13):

> one who organises, manages, and assumes the risks of a business or enterprise.

This definition is inclusive of anyone who runs a small, medium or large business. It could include an independent operator, or the entrepreneur who works as part of a team or in a partnership. Gray offers another definition which might be relevant to potential entrepreneurs such as SBIS (Gray, 1987: 13):

> An entrepreneur is someone who exhibits entrepreneurial characteristics.

According to Schumpter, (1934: 74 cited in Jones & Sakong 1980:177) in his book, "the theory of economic development", what distinguishes entrepreneurship from management is not only the ability to initiate a new economic activity, but also most critical the characteristic of formation of "new combinations of means of productions". Jones and Sakong emphasized that this combination was seen more broadly than is commonly thought because it included:

1) the introduction of a new good - that is, that is, one with which consumers are not yet familiar (or a new quality of good);
2) the introduction of a new method of production, that is, one which has not yet been tested in the concerned branch. But may not necessarily be founded upon a discovery of scientifically new knowledge;

3) the opening of a new market by a particular branch of manufacture of the country in question which it had not previously entered into regardless of whether or not this market existed before;

4) the conquest of a new source of supply of raw materials or semi-manufactured goods irrespective of whether such a source existed before;

5) the carrying out of a new organisation of any industry, like the creation of a monopoly position or the breaking up of a monopoly position.

there are about 18 types of entrepreneurs as described by Gray, (1987: 13-18), to which an interested reader may refer to, but seven of these, relevant to this study are:

a) Soloist who is a self-employed individual operating alone or with a few employees only;

b) Key Partner who is like a soloist but requires inactive partners for financial support;

c) Grouper refer to individuals who prefer the psychological and/or financial relief of working with a group of partners;

d) Professional which includes traditional professionals such as solicitors, accountants, dentists, doctors etc.,

e) Inventor-researchers are usually tinkers or frustrated professional who decide to start another business, such as a laboratory to test a new product or service;

f) High-tech entrepreneur generally has high educational level and technical expertise;

g) Work force builder starts working on his/her own and builds a large company through astute hiring, delegation and organisational abilities.

2A.3 HISTORICAL BACKGROUND

Modern entrepreneurial theory dates back to the works of Cantillon who recognised the central role played by the entrepreneur in the trading process. He originated the theory of the entrepreneur as risk taker (Hapert & Link, 1982, cited in Highley, Nov., 1987: 2). The pervasive power associated with the entrepreneur is a recent phenomenon although trade has long been central to human activity. This was due to the historical low status accorded to the trader in western societies. This was largely because of the negative influence of Aristotle who down graded trade as being potentially exploitative in the middle ages. The church also played a part by centuring usury, traders and accumulation of wealth (Homer,cited in Highley, Nov.,1987:2).

The advent of modern economic and social thinking forced the archaic philosophies to give way to the new developments. Merchant classes had often been associated with non-conformist and independently minded religious movements (for example Lollardy) during the middle ages. But the Reformation period in the sixteenth century enabled the establishment of a permanent religious philosophy in parts of Europe which cherished the ideals and ambitions of the merchant class. The Reformation period had also a penetrating influence in changing the catholic concept of justification by works into the justification of work, with both Luther and Calvin emphasizing the spiritual importance of work. Luther for example stated "a cobbler, a smith, and a farmer, each has the work of his trade, yet they are all alike consecrated priests and bishops" (Martin Luther cited in Highley, Nov., 1987: 3). This was a turn about of values from sanctity of

work to a position whereby success derived from hard work was not only condoned but encouraged leading to the sanctity of the individual. This subtle but important change in attitude towards wealth opened the way for the economic developments of the Industrial Revolution and their mapping out by the early French and English economists. These events influenced the word entrepreneur (used first time in the fourteenth century, Hoselitz, 1960 cited in Highley, 1987:3) to take on more definite meaning. Associated with it was a list of attributes which in turn were identified with capitalism and its values. Say (1845 cited in Highley, 1987: 3) has been identified as being instrumental in shaping the definite meaning of an entrepreneur who he described as:

> He requires a combination of moral qualities that are not often found together. [He needs] judgement and perseverance and a knowledge of the world as well as of business. He is called upon to estimate with tolerable accuracy, the importance of the specific produce, the probable amount of the demand, and the means of its production; at one time he must employ a great number of hands; at another, buy or order the raw material, collect labourers, find consumers and give at all times a rigid attention to order and economy, in a word, he must possess the art of superintendence and administration.

This definition is the essence of the "classical entrepreneur" who is seen as an outstanding person with exceptional qualities. With the coincidental arrival of the colonial movement in the major western industrial nations, patriotism and trade became intricately woven together while politics, trade and religion gave way to the colonial merchants. By the end of the Nineteenth Century, entrepreneurial personality was given a philosophical credibility, interwoven with religion, philosophy and patriotism. The concept was questioned and was further challenged by Marxism, facilitated by the Russian

Bolshevik Revolution. The new Soviet State turned the entrepreneur / capitalist into a political power concept for both left ant right.

In the new area of small business research, the classical super-human model of the entrepreneur has been regarded to be inappropriate for the modern times. Recent theories look towards more inwardly directed motivations. However the characteristics trend of thought regarding the classical entrepreneur has not been rejected and has been influential in developing the sociological psychological thinking.

2A.4 THE ENTREPRENEURIAL FUNCTION

A better way of viewing the fundamental function of an entrepreneur, it is argued, is to view him as a "co-ordinator" instead of the classical view of a super-human performer of all functions of an organisation. This would result in increasing the supply of entrepreneurs.

Jones and Sakong (1980: 180) while accepting that entrepreneurship was different from management criticized the traditional and academic monistic view of an entrepreneur of a Henry Ford type who is involved in doing everything. This concept argues that the entrepreneur is either wholly present or absent. It is seen by Jones and Sakong as an inappropriate as the critical characteristic is the formation of "new combinations of means of production" as Schumpter states

Recall a similar criticism made earlier in chapter 1 appendix 1A2.2.1.3 when discussion the requirement of independent management. it was argued that the requirement of managing every

business by the entrepreneur himself was neither necessary nor practical in the Zambian situation for a small business to exist. Reference to the types of entrepreneurs (though partial) in the previous section will show that apart from the soloist, there are 17 other types, indicating that there need not be one type of entrepreneur who does everything by himself. A combination is normally the practical possibility.

Jones and Sakong (1980: 180-181) however accepted Peter Kilby's view that the monistic model

> is based upon implicit assumptions about the nature of a well-functioning underdeveloped economy....[But] when the assumptions are relaxed and ignorance, heterogeneity (segmented markets), impeded factor mobility...input non availabilities are brought into the model, then the extraordinary qualities of the entrepreneur, and the possibilities of their limited supply, become apparent.

Monism entrepreneurship view is based upon pervasive market imperfections. But Jones and Sakong offered a counter proposal concept of "lenticular" which likens an entrepreneur to "a lens that focuses the energies of others" (Jones & Sakong, 1980: 181). In this process, the entrepreneurial bundle, according to Jones and Sakong's argument, can be decomposed into various functions. They maintain that portions of these functions

> are always present and only certain missing parts need be added to expand the effective entrepreneurial supply.

These functions include:

1. perception of a new economic opportunity including:
   a) new products;
   b) new processes of production;
   c) new markets;
2. evaluation of the profitability of a new opportunity;
3. gaining command of financial resources;

4. plant, design, technology, and construction supervision;
5. recruiting and training new personnel;
6. dealing with government;
7. dealing with supplies and purchases.

They argued that in a 'primitive' economy, the absence of skill at any of the functions could certainly seriously constrain the entrepreneurial act. But in a more developed economy, not only can any of the above be hired but all could as one goes down the list. They therefore asserted that what would be left for the entrepreneurial act is one of co-ordination and filling gaps which the market cannot as Leibenstein would put it. They indicated that entrepreneurial development did not need the increased supply of monistic type of entrepreneurs but by increasing the marketing mechanism and agents so as to allow the success of existing supply of lenticular entrepreneurs. They therefore concluded by offering three components of the supply of effective entrepreneurial activity:

1) the stock of individuals with lenticular intent;
2) the level of lenticular ability within that group and
3) the availability (quantity and quality) of agents and markets that reduce the needed for "input completion by the entrepreneur".

Kilby's view on the constraints that may limit the supply of entrepreneurs is acceptable. Jones and Sakong's model of lenticular entrepreneur which they restricted to developed countries is also partially acceptable. This model, which sharply contradicts the monistic concept hardly applies to developing countries such as Zambia as they realized. It could

be added that it can not apply to small businessmen even in developed countries. Hiring out all the listed entrepreneurial functions is extremely difficult in developing countries. Therefore their recommendation of concentrating on existing supply of lenticular entrepreneurs would have very serious consequences. The reasons are simple. None of the three components of the supply of effective entrepreneurial activity is easily tenable. It was for example shown in chapter 4.7 that there was no stock of individuals with lenticular intent let alone monistic types in Zambia. The level of lenticular ability and availability of agents and markets needed to reduce the need for "input completion by the entrepreneur " are also lacking due to economic, social and political constraints (see chapter 3).

Jones and Sakong (1980: 192) themselves admitted at least regarding finance, when they said:

> .... It is well known that large firms are favoured over small firms in obtaining finance.

But they do not accept the common explanation that size creates power. They attribute the apparent size bias to a proxy for a more fundamental reason evidenced by more assistance obtained by successful entrepreneurs than those who are just starting out regardless of size. They pointed out:

> ...in Korea, the first entrepreneurial act is a go-it-alone proposition. Most fail, but those who succeed are then provided with substantial support, especially financial, in subsequent acts.

Jones and Sakong's contention that all the functions of the entrepreneurial bundle can be hired out appeared not to be supported by the results of their study. In addition to financial constraints faced by new firm start ups described above, they reported that over 50% (2/3 in three functions) of

the responding chief executives (whether owners or managers) performed almost all the seven functions listed above, except financing, technology and technical training which were 45% 44% and 43% respectively. The next largest category of performers was the employees and relatives which ranged from 14% to 30% except technology (32.9%) and technical training (39.3%). It is therefore not surprising that outside the firm performers ranged from 5% only in personnel to 27% in conceptionalisation with the obvious exception of finance which accounted for 41.5%.

It is therefore questionable whether the concept of the "lenticular" function of an entrepreneur can be fully applied in practice when 50% of the work was done by the entrepreneur himself and at least 73% within the firm. Zambia's problem is related to supplying entrepreneurs through identification, encouraging and supporting first-time entrepreneurs. It is that ability of succeeding on first or subsequent attempt (or failing) in establishing a firm that distinguishes an entrepreneur from a manager.

The next section looks at the theories that explain the supply or demand for entrepreneur (whether monistic or lenticular).

2A.3 MOTIVATION THEORY: ENTREPRENEURIAL PERSONALITY

In small business policy issues, apart from the first major issue of determining the job creation capacity of small firms (and other target audiences needing support), the second important issue, which in fact is the most fundamental is entrepreneurial personality. The basic question that a policy

maker, who is concerned with achieving full employment, is interested in is: how can he identify entrepreneurs who can increase the small business population, thereby creating more employment? This is the critical question because determining the number of jobs that can be created by a sector or the need for identification of other relevant target audiences will depend on the type of entrepreneur one is concerned with. The need for identifying potentially successful businessmen arises because it is a fallacy to expect that all businessmen will be supported. Further, it is also incorrect to assume that the support will be equally distributed or needed. Some businessmen who can not effectively contribute to employment creation should not be supported if the objective is to achieve full employment. Supporting individual small businessmen would be equivalent to subsidising individuals at public expense. Selective support would avoid wasting resources. Ettinger and Fromont (Spring, 1985: 55) support this view when they observe

> all studies take into consideration the environment of creation and the entrepreneur's personality.

The problem therefore is to find a way of identifying successful potential or existing businessmen who should be encouraged. Providing an answer to this question requires an examination of entrepreneurial theories or models.

Entrepreneurial personality has been the subject of interest by many authors. Among the purposes, has been an attempt to identify what makes up an entrepreneur, distinguishing him from managers in other organisations, let alone from other people in a society. It is hoped that such factors or information would help in differentiating the successful and the unsuccessful business owners, or in enabling one to predict which are likely to become

successful. In turn this would help decision makers in focusing their efforts on such types of people to increase their numbers.

Historical philosophies of an entrepreneur have been influential on the recent entrepreneurial research approach. This has concentrated mainly on psychological and sociological factors. Their aim has been to focus on identification of entrepreneurial types. Some, such as the Trait and Psycho-dynamic Models have focused on internal determinants to the individual. Others, such as the Social Development Model, influenced by theories of social marginality, have singled out external influences on personality as the most critical. They have however not renounced the elements of internal direction. Other researchers, after failing to find convincing empirical support for these theoretical approaches have established typologies which attempt to explain behavioural differences between entrepreneurial groups. Chell (1984) has for example identified three basic theoretical paths. Highley (1987) has recently offered the job change model based on the Catastrophe theory and stress models.

This implies, up to date, no definite conclusions have been found (Chell, Spring, 1985: 43: Deeks, 1976) although research studies on this issue proliferate.

Although there is a great wealth of research investigations on entrepreneurial personality, Chell (Spring, 1985: 43) has condensed them into three conceptual psychological models: Psycho-dynamic, Social Development and Trait Models. She has proposed a reconceptualisation of entrepreneurship into an environmental-situational model.

2A.5.1. THE PSYCHO-DYNAMIC MODEL

The psycho-dynamic model of Kets de Vries (1977: 45), is based on the theses that the decision to become an entrepreneur is influenced by early family background life experiences of "endured hardships". It is claimed that these have been formative in shaping a deviant personality in an individual who is unable to fit comfortably in organisational life. He is impulsive, dissatisfied, insecure and he lacks self-esteem and confidence (p. 46). He rebels against authority since he distrusts and is suspicious of anyone in position of authority. Eventually, his internal dissonance forces him into non-structured situation "where he can assert his control and independence.... [forming his own organisation]... often becomes the only alternative" (pp. 45-50).

2A.5.2. SOCIAL DEVELOPMENT MODEL

The second explanation of entrepreneurial personality has been offered by Gibb and Ritchie (1981) in their social development model. This model emphasizes the importance of different adult situational and social influences at significant points in an individual's life cycle which influence him to start a business. The model was reduced to four typologies of an entrepreneur on this life cycle: and suggest certain key influences at each stage which would typify types of entrepreneurs: 'Improvisers', 'Revisionists', 'Supersedors' and 'Reverters'. The 'Improvisers' would typify an entrepreneur at the early stage of his life or career. The 'Revisionists' are slightly older and near their mid career while the supersedors

are in the second life and new career. But in the last stage of the life cycle come the older, late and post career Revertors.

Many researchers have been influenced by the typological perspective in explaining entrepreneurial personality characterized by Gibb and Ritchie. Most were persuaded into this line of thought by earlier works of smith (1976), Hornardy and Bunker (1970), who distinguished between craftsman and opportunistic entrepreneurs; and by Versper (1980) who proposed 11 entrepreneurial types.

Using the typological approach, Ettinger and Fromont (spring, 1985:55) have for example distinguished between independent or solitary entrepreneur, characterised by concern with autonomy or independence; and the entrepreneur-organisation maker. The later is depicted by pre-occupation not only with autonomy but also with power to lead an independent ever growing business organisation. Ettinger and Fromont therefore advocated that stimulatory policies for the creation of businesses with major objective of providing full employment, should be aimed at removing obstacles (e.g. psycho-sociological climate) faced by organisation-makers rather than those faced by the solitary entrepreneurs (e.g. social, administrative, financial). This is so because the former represent "the real potential of economic development". In other words, more businesses can be created through stimulation of pull or push factors. But concentrating on push factors requires moulding individuals into future entrepreneurs by developing their motivational predispositions (such as certain personality traits, family and social environment, prior training and professional experience), some of

which are not easy. Stimulating pull factors, is aimed at attracting potential businessmen to effective business creation by providing opportunities, starting opportunities and favourable environment (Ettinger and Fromont, Spring 1985: 57). They proposed the use of selective and more efficient policy of 'pull' effect factors. It is more efficient, they argued, because it is aimed at the entrepreneurial potential in a more accurate manner.

2A.5.3 THE TRAIT MODEL

The third thesis of entrepreneurial personality is the long-standing Trait model. It was first advocated by McClelland (1961, 1965, 1969) and later endorsed by others such as Brockhaus (1980, 1982) aimed at identifying the Trait or cluster of traits or characteristics that differentiate the entrepreneur from other groups. Mclelland singled out achievement motivation as the basic characteristic while Hornaday and Aboud (1971 in a follow up study to Hornaday and Bunker's study (1970) on the applicability of 21 characteristics, suggested that 'achievement', 'support', 'independence' and 'leadership' differentiated successful from a control group. Timmons et. al. (1797) suggested that more than 20 characteristics distinguished the entrepreneur while Cronie and Johns (1983) found different ones.

2A.5.4 PERSONAL SITUATIONAL ENVIRONMENTAL MODEL

A fourth grouping of researchers, led by Chell has cast doubt on the validity and applicability supremacy of any of the three models for lack of empirical evidence on their ascendancy up to date.

2A.5.4.1 CRITICISMS OF THE PSYCHO-DYNAMIC MODEL

Chell (Spring, 1985: 43-45) highly criticised the psycho-dynamic model for four basic reasons. First, it lacks universal applicability, but concerns itself with extreme cases. Second, it is unable to differentiate a particular entrepreneur from other individuals with similar deprived backgrounds. Third, it lacks supportive research evidence (Gibb and Ritchie, 1981: 195-6) of behaviourally deviant disillusioned employee. Fourth, it fails by considering only characteristics but not reasons and motives which are relevant for start-ups as Boswell (1973) shows. Other evidence from sociological literature (Boswel, 1973: ; Bechhofer and Elliot, 1976; Scase and Goffee, 1980; Stanworth and Curan, 1973, 1976) also offer reasons and motives as explanations for start-ups. Fifth, if the model was valid, "it should be possible to identify a set of reasons (consonant with the deviant stereotype) which typify the entrepreneur". But research evidence show that these vary widely (Boswell, 1973; Chell and Hallworth, 1985; Scase and Goffee, 1976; Watkins, 1976; cited by Chell,1985: 45). Sixth, that the model is not universal since it leaves open the possibility that there are other motives (within the displacement categories) for start-up. Seventh, it emphasizes the social situation instead of the psycho-dynamics of the individual.

A closer look at the fourth criticism is necessary. This is that apart from characteristics, there are also reason for start-ups. Understanding of these may be helpful to policy and decision makers in focusing their efforts on the target group of entrepreneurs.

The reasons can be condensed into two basic categories: circumstantial developed by Shapero and social marginality thesis (Dickie-clarke, 1966: Stanworth and Curran, 1973, 1976; and Scase and Goffee, 1980; cited by Chell, Spring, 1985: 45). The first classification consists of four aspects:

(a) displacement (person feels comfortable in being an entrepreneur, but there is no outside force to influence him in becoming one);
(b) disposition to act (e.g. desire for independence or autonomy);
(c) credibility (e.g. need for admiration or peer approval); and
(d) availability of resources.

According to Chell the problem with Shapero's model is the need to allow several things to take place before taking a major step.

The second branch of reasons for forming businesses lies in the social marginality thesis. This model suggests that when there is an apparent dissonance between an individual's personal attributes and role(s) he holds in society, there will be a greater impetus for him, to start a firm if the present occupation is deemed lower than the perceived one in the other alternative, due to pull or push effects. The pull effect exists when a person is attracted to a more positive, socially esteemed role in society. The push effect take place when a person wants to reduce the discrepancies between self-image and socially conferred role image. In this case he gives negative reasons such as dislike for working for someone else, being exploited or undervalued or no promotion prospects as being the reasons for being pushed into forming a business.

2A.5.4.2 CRITICISMS OF THE SOCIAL DEVELOPMENT MODEL

The major complaints of Chell against the Social Development Model and the resulting typologies are:

1) that the model is for all intents and purposes, a situational model;
2) substitution of the criticised traditional stereo type entrepreneur with four (or two as in the case of Ettinger and Fromont);
3) methodological boundary problems (not statistically valid sample); and
4) inability to differentiate between successful and unsuccessful small businessmen or to predict who are likely to be entrepreneurs.

2A.5.4.3 CRITICISMS OF THE TRAIT MODEL

The trait model advocated first by McClelland (1961, 1965, 1969) has been criticised on several grounds. The first of the most important ones is that the original internal 'locus of control' concept of Rotter (1966) intended for a learnt behaviour response (not trait) fails to distinguish between successful entrepreneurs and senior managers although it is useful in distinguishing successful entrepreneurs. The second one is that the 'aspiring' entrepreneurs could have been acting out their own stereotypic concept of the entrepreneurs. Questions are raised as to what point in time traits should be measured, whether they are enduring or whether it is correct to think of entrepreneurship entirely in terms of personality variable. Third, the trait concept in psychology, in general has been under attack. The criticisms relate to low correlation between the measure and

behaviour; assumptions of individual consistency when an individual may be observed in a limited situation; and inadequacy of the trait approach alone to predict behaviour.

2A.5.4.4 POSSIBLE SOLUTIONS

2A.5.4.4.1 CHELL'S COMPOSITE MODEL

Chell (1985:49) has therefore proposed what may be referred to as a personal-situational-environmental model which is said might be more appropriate. The model (which this researcher agrees with see section 2A.5.5 for views on the implications of the theories) considers composite factors relating to the environment, situation, the person and expected roles which all may influence the way a person acts to achieve output. Chell's Model's variables were listed as:

a) an individual's competencies (such as skills, or abilities) as per the Trait model;
b) encoding strategies and personal constructs;
c) expectancies - that performance in a certain situation depends in part on what a person expects might happen;
d) subjective values attached by an individual to available courses of action which may determine choice;
e) self-regulatory systems and plans - that people have different goals or standards which they try to maintain and/or achieve.

All these would be helpful in determining the entrepreneur's behaviour in terms of:

a) skills that he has or needs;
b) perception of the environment;
c) his expectation of the viability of the business, its future

growth or expansion;

d) Outcomes which are valued (growth expansion);

e) his goals/objectives and how he intends to achieve them.

Chell stated (1984: 51-52) the model is also to be valuable in:

a) understanding the key aspects of the small business environment;

b) understanding how the small business perceives and operates within that environment;

c) in determining what aspects of the environment need to be manipulated or changed in order to make the business more effective;and

e) in terms of training and personal development of the entrepreneur.

2A.5.4.4.2 Job Change Model

Other researchers in the fourth group who dispute the supremacy of any of the three models (trait, psycho-dynamic and social development model) point out that underlying all these hypotheses are motivational theories which stress the identification of specific factors, in the individual or his environment, and which determine behaviour. In the case of the Trait Model, the specific factors are within the entrepreneur himself. But the Psycho-dynamic and the Social Development Models, in addition, take into account, in varying degrees the influence of the external environment. These notwithstanding, underpinning all these theories is "a presumption that the entrepreneur is motivated by a desire for achievement, success, or self-actualisation" (Highley, 1988:6). He contended that critical analysis of the theories in terms of Maslow's Hierarchy

of Need, "the presumption is that all entrepreneurs are aiming to move towards self actualisation". That is the "process" theories, Equity Theory and Expectancy / Valence Theory explain an entrepreneur's behaviour. This therefore subjects the entrepreneurial motivation to further examination.

One of the suggested approaches is that entrepreneurship is basically a job-change situation with both non-careerist and careerist. The former starts business as a way of living without any detailed preparations. A careerist carefully selects business ownership opportunities as a career goal with detailed preparations, consultations with experts and personal training in areas he is deficient to avoid failure. But both of them start from their present constructs.

Highley's (1987: 7) disagreement with the three models which this researcher shares, was based on their common assumptions. He argued that although models appeared to vary greatly, they had three common characteristics. First, is that the movement from employment to entrepreneurship is perceived as a continuum and the distance travelled by any individuals depends on personal and environmental factors. The second characteristic is the assumption of presence of goal directed behaviour aimed at success either in monetary terms or in terms of some positive movement up "a Hierarchy of Need". Third, as a result the third assumption is that a change from employment to self-employment is the result of a conscious re-direction of the individual's career path.

Highley's contention was that if these assumptions were a true reflection of an entrepreneur's behaviour, then the business founder would be expected to exhibit a number of behavioural

outcomes. These were:

a) motivation to avoid failure (since he is positively motivated to succeed);

b) adoption of risk minimising strategy requiring detailed planning;

c) training in perceived or known weakness areas to guarantee success;

d) undertaking this change in role as part of the conscious implementation of a well directed career / life strategy.

The major problem highlighted with current theories, Highley stated, is the apparent lack of homogeneity of the entrepreneurial class. These range from craft-based self-employment through to the "proto-tycoon". There also appears to be little real difference between established entrepreneurs and senior managers (Cronnie & Johns, 1983 cited in Highley, 1987:8). Managers in large organisations also manifested entrepreneurial characteristics (Cooper 1984). Other problems related to contradiction between the portrayed pattern of well ordered continuity and the observed entrepreneurial behaviour patterns such as resistance to advice, poor planning and hurried and poor quality decision-making. These were seen as patterns of irrationality inconsistent with an overall aim of success.

The global high failure rate of 66% among new enterprises within the first three years (Ganguly, 1985) was viewed as being at odds with highly organised and goal oriented. Other studies support the notion of high failure rate for example Mason (1984/85: 34) and Jones and Sakong (1980: 192) in the case of Korea where "most fail". Reference was made to other studies

which found:

a) a high percentage of businesses with insufficient planning in the founding process (Robson Rhodes, 1981; Legal and General, 1985; Hull and Hjern 1981; Page 1981);

b) lack of support for goal driven since reasons cited for start ups were as often negative as positive (Scott, 1980, Gill, 1985);

The major conclusion was that the process of business start up can be viewed as job search or simply a change of job with non-careerists and careerists. The reasons were that the majority of business founders have a non-careerist background (Robson Rhodes, 1981; Page, 1981). The non-careerist sees business formation as a means of earning a living. There is casual approach, poor processing of information and with shorter term goals, non exposure to management problems and unawareness of the required skills or the anticipated difficulties. He also tends to be relatively poorly prepared, moving in and out of self-employment in response to temporal advantages.

But the careerist has a much more rigorous approach, is aware of problems of business management and difficulties which lie ahead. He makes better quality decisions, has defined set goals and a strategy for reaching them; careful evaluation of job moves with reference to prospects and consults experts in the process. He takes up training in areas he is weak, providing himself with basic management skills. Available opportunities will be rejected unless they fit in with the desired long term goal. In short he has a cognitive framework for evaluating entrepreneurial opportunity.

2A.5.5 IMPLICATIONS OF ENTREPRENEURIAL THEORIES

The approaches by Chell and Highley, acceptable in this study, have important implications for promoting small businesses and identifying potential entrepreneurs. These models imply that there are several approaches to becoming entrepreneurs as research evidence has shown. This basically means that the individual's competencies, expectations (and their values) and his regulatory standard in his career life are important influences in selecting business ownership. This therefore means that several methods involving push and pull factors in the environment can be manipulated, situational and trait factors can also be taken advantage of to encourage entrepreneurship.

Zambian government's small business stimulatory policies are aimed at providing full employment. These theories are therefore important in deciding whether efforts should be concentrated on organisation makers by removing the constraints relating to the Psycho-sociological climate (pull factors) or on solitary entrepreneurs by eliminating social administrative or financial limitations (push factors). Chapter 3 which dealt with the unemployment problem tends to suggest that both need attention.

Manipulating environmental factors by concentrating on those factors relating to small business support audiences involving both pull and push factors would be appropriate. Manipulating push factors relating to the individual such as traits, family and social environment was difficult. But others within this category, propagated by the social development model, can be

accomplished. These include provision of management training and professional experience. One of the concerns of this study was to find out the adequacy of education received by SBIS graduates in preparing them for taking business ownership for their careers. Section 2A.6 therefore now closely examines the need for supporting small business sector audiences and particularly the provision of management education and training in small firm policy stimulation. The purpose is to provide a theoretical framework and research evidence which might be valuable in determining whether management education and training is needed for potential and practising entrepreneurs in Zambia's case.

2A.6 SOCIAL DEVELOPMENT MODEL: PROVISION OF MANAGEMENT EDUCATION AND TRAINING

When arguing whether a policy of supporting all small businesses, was a sound one, some trainers, educators and business people question "the need for and usefulness of" small business training since "it is unwanted and in some cases impossible to deliver" (Solomon and Carvey, Autumn, 1985:25). Results of SBA survey on "the state of Small Business Training and Education" showed that "direct intervention into the small business training market would be the last resort" (Solomon and Carvey, 1985:25 & 31). The low profile of SBA is partly influenced by reluctance of businessmen to accept management training. Similar findings have been reported for their counter parts in the U.K. who refer to "the impossibility of any one telling me how to do my job; or who describe of why "my firm is different and unique" (Watkins, Spring, 1983:29).

It is however argued that small businessmen's view of adequacy could be self-deception since other studies have shown that most people are not armed with skills of starting business upon leaving school. This would therefore tend to show the need for management education. This is also true in the case of Zambia for example, graduates are not armed with adequate skills to start their businesses.

2A.6.1. SUPPORT FOR SMALL BUSINESS SECTOR AUDIENCES

Provision of management education and training is related to the wider issues of push factors, some of which involve developing policies aimed at supporting small business sector audiences. Apart from determining whether or not small firms generate more employment, the second important policy issue for decision makers, supported by SBA (1983:72) is identifying precisely the kinds of firms that generate new jobs. The question is whether Zambian government should directly or through SIDO address more of its efforts and scarce resources towards supporting first-time entrepreneur who is an unknown quantity with a high risk factor. Alternatively, the issue is whether such efforts should be aimed at those areas where there is the highest social return i.e., those who have put together a small scale business. Within the later group, the next point is whether support should be given to existing and growing small establishments with 20 or more employees, or new establishments with fewer than 20 employees. These type of questions require practical locally derived solutions.

In recent years, researchers have made proposals for a redirection of small firms policy away from its current rather indiscriminate and potentially wasteful support for the entire sector (storey, 1983:). Mason (1984/85: 44) advocated for the concentration of "efforts on increasing the number of high 'fliers'". That is those firms whose development is fairly radical notably in terms of their rate of expansion, sales of operations, product development, market growth and management structure.

The implication is that small business programmes differ widely. They range from the most expensive, educational types directed at potential intenders (students of primary, secondary and tertiary levels of education) and management training programmes designed for those who are committed to establishing business organisations as careers. These programmes then continue through government fiscal and monetary policies, to consultancy and finally to the cheapest information provision centres which act merely as sign posts. These programmes have been discussed by various writers such as Chee (1985) for Malasia, a developing country; Meredith (1984) for Australia; Kirby (1984: 29-34) and Ball & Gilligan (1985: 63-64) for Britain; Watkins (1983:41-43) for Europe; and Solomon and Carney, (1985: 3) for the US Small Business Administration.

As illustrations, of the need for major detailed research and careful planning before major policy decisions regarding small firms are taken, reference will now be made to the cases of Malasia (a developing country), U.S.A. and Britain (developed countries) to show the growing changing practices in some countries.

In the case of Malasia, Chee (1985:18-20) reported a number of programmes which had been established, carried out by a number of agencies, including the National University of Malaysia's Entrepreneurial Development Unit. But the notable ones were MARA, established in 1965 and National Productivity Centre (NPC), established in 1975. MARA's programmes were aimed at creating and developing local 'bumiputras' entrepreneurs, providing training, loans and advisory services. NPC'S programmes were aimed at a) creating entrepreneurs from students at vocational schools and

polytechnic, private sector workers, (now turned over to MARA) existing small businessmen and ex-servicemen; b) providing consultancy; and c) entrepreneur development courses (stopped in 1984). Thus MPC remaining with the task of upgrading existing entrepreneurs. MEDEC''s programme included a Master of Science (Entrepreneurial Development) and Advanced Diploma in Small Business Management (both of them discontinued in 1977), entrepreneurial development programme (for existing entrepreneurs with problems), basic entrepreneurial and business training for intending technology students, and business development programme for existing small businessmen (exposing certain problems that exist in certain businesses) research and consultancy.

Chee's major criticisms were that since programmes were actively reactivated, in 1975, with the objectives, of creating at least 20,000 new entrepreneurs, having invested US $100 million in the project (op. cit. p13) only about 20% of 2,000 recruited and trained per year manage to create a business. He questioned the wisdom of this wastage which can even lead to instilling fear of entrepreneurship in the unsuccessful entrepreneurs for the rest of their lives. He attributed this high failure rate to (Chee, 1985: 22-23):

1) poor screening and selection;
2) poorly implemented programmes due to
   a) lack of experienced and qualified trainers (especially practical); and
   b) lack of good training manuals;
3) poor co-ordination of entrepreneurial training programmes;
4) failure to co-ordinate training programmes with other assistance programmes; and

5) lack of using stage development, beginning with modifications of school curricula in order to integrate entrepreneurial training.

He therefore concluded that the best cost effective way to create entrepreneurs '*en masse* is by mobilising the educational system or provide suitable business opportunities.

Some studies lend some support to the notion of negative views towards management training. Watkins (Spring, 1983: 29,39 & 43) found in the case of U.K., that the responding majority, 46% of small business managers, "felt it had been of no value", and 12% said "it had been of only limited value". Only about 26% had "described the benefits as 'immense'. Watkins (1983:34) noted that since some managers "stressed that there was 'no way!' in which they wished / were prepared to develop" even their subordinates, this could "underestimate the fear of developing potential competitors" since a large proportion of these subordinates would be relatives.

He therefore observed that segmentation of the small business market can be useful since he found that there was inconsistency between perceived versus real needs of the sample firms (op. cit. p. 42). He came to this conclusion after finding that there was a correlation between areas where catastrophes had occurred and those perceived areas of weaknesses in which owner-managers tacitly accepted that training would improve their firms managerial competence (op. cit. p. 41). He suggested that management development may be useful if based upon "an individual's stage of career development, aspirations and opportunities. These segments were listed as 1) existing owner-managers; 2) other small firm managers; 3) business founders

(prior to start-up); and 4) designated successors. He also mentioned two other indirect markets for providers of management education as 5) students of management/business, and 6) other providers (op. cit. p. 43).

Utilising the segmentation of target group similar to Watkins suggestion, Kirby (Spring, 1984: 32-34) reported for existing small retailers in the U.K. that most participants "felt the course had been a valuable experience". He conducted training involving lectures, discussions and consultancy modules. The participants also claimed that the course had "benefited their businesses" in bank savings (up to £500 per year in one case), turnover, (an increase of about £700 a week) layout etc. (Spring, 1984: 36- 39).

Solomon (1982; Solomon and Carney, Aut., 1985: 25) reports that in the case of the USA, some trainers, educators, and small business people question "the need for and usefulness of" small business training since "it is unwanted and in some cases impossible to deliver". However, supporters of management training argue that it is as necessary as in many other successful large businesses which invest billions of dollars in the training of managers to acquire information, innovation and managerial skills which are the keys to success (Solomon, 1982).

The SBA conducted a national overview of the "State of Small Business Training and Education" in the small business community in 1983 to test whether there was a need for such training and the role of SBA. Results indicated that there was a need and role. The role was however seen to be one of an (Solomon and Carney, 1985: 25 & 31).

> elder statesman who acts to assist other public/private partners to define the training needs of the local small business community, [helping them] to implement customised programmes

to meet local needs, consultancy, support services such as mailing privileges, publications, visual aids etc., and cosponsoring events to promote programmes. They stated that

> ... direct intervention into the small business training market would be the last resort.

Participants however, felt that SBA could also get the involvement of trade associations, banks, universities and co-ordinate these resources to achieve improved small business training and education effort (p. 28).

The little involvement in small business training, expected of the SBA, acting merely as a watch-dog could be attributed to several explanations. First, it could be self deception by small businessmen of their competency. Second, it could be due to the strong free enterprise, capitalistic system of the US, which would view any outside help as an intrusion on their privacy and independence. Third, since SBA has been in existence for over 33 years now, its role may not be viewed as critical as it was some decades ago. Fourth, although management education and training are accepted as being important, this role can and is being fulfilled by other bodies. Therefore the small businessmen feel adequately prepared and equipped with skills upon for example leaving college or university and are able to start successful small businesses.

This is however not the case in the U.K. and many developing countries. These views are confirmed by Watkins and Cannon. David S. Watkins (1983: 29-30), Director of New Enterprise Centre at Manchester Business School conducted a study of more than 200

British owner-managers, who showed reluctance to management training although respondents needed it. He observed that the typical British businessman's response to a suggestion of management education or training if he is polite, will be a reference to the impossibility of " 'anyone telling me how to do my job', a description of why 'my firm is different and unique', and - probably moans about the national training bureaucracy."

Professor Tom Cannon (1985: unpaged), Head of the department of Business & Management, Director of the Scottish Enterprise Foundation, and the architect of Graduate Enterprise Programme at the University of Stirling, also shared his views on provision of management education and the inadequacy of graduates upon graduation to start or manage a business. He stated:

> ...only 10% of new companies are started by people under 30 in the United Kingdom against 30% in the USA. Most kids come out of university with little idea [of] how to earn money, never mind how to raise it! By contrast, most kids in the US come out knowing how to earn money

He further observed that the graduates are unlikely to manage the businesses of Britain in the next 30 years. This is so because

> ... only 500 out of 14,500 graduates will leave college to run a business. That is 0.3 of 1%.

He compared U.K. to other developed countries where "graduate led businesses play a dominant role ... in economic success", being about 60% in USA, about 70% in Japan and 55% in Germany (1985: unpaged).

These results show the need to provide management education and training in some countries. While selective training, may be preferable to indiscriminate training, Chee's view of using existing institutions only, which this researcher does not agree with, was criticised by Meredith (1984: 14). He also attacked

those who scoff at the supporters of management education and training. He contended that countries should be prepared to invest

> ... significant resources ... [in] small business education and training

to reap the best results since both of them are important for small business development. He pointed out that if it is accepted that the small business sector plays a critical role in a country's economy, in terms of numbers, contribution to GNP, employment, taxes etc., then this significance in the largest audience should be reflected in significant investment in both management education and training. He also highly castigated the tendency of failing to distinguish between management education and management training. The former has been defined Funch (1981: cited in Meredith, 1984: 10) as the systematic study of management and its related disciplines. The later refers to the learning of specific skills and techniques which are essential for the specific support of an individual, the group and the series of tasks that make up a specific field of operation.

Meredith, argued that small business target audiences differed significantly and each deserved a separate programme to achieve the best results. The target audience mix range includes (Meredith, 1984: 14):

1) potential intenders (all students of primary, secondary and tertiary levels of education; employees of large public and private enterprises);
2) committed potential entrepreneurs;
3) present owners-managers; and
4) the multitude of multiplier agents providing services for small business.

The last group of multiplier agents includes:

a) professionals in practice (such as accountants, solicitors and branch bank managers who are in contact with small business owners and managers);

b) teachers and lecturers at all levels of education;

c) government employees at policy level;

d) employees of government small business agencies; and

e) organisations such as chambers of commerce, and trade.

The implications is that Small business programmes should take into account all these target audiences. Present training programmes appeared to be biased towards established small business owners at the expense of, for example, trainers and students (who could select ownership and management) of small businesses as a career alternative (Meredith, 1984: 14 & 16). Presently all education is geared towards preparing students to enter large organisations (Meredith, 1984: 12), yet some should enter small business, Meredith (1984:13) therefore rightly concludes.

The important and relevant point for Zambia is that inability to separate management education and management training leads to failure in differentiating the target audience and designing appropriate programmes for each. But either all target audiences are lumped together and one programme is designed for them, or some target groups are completely ignored.

The criticism regarding biased structure of educational system equally applies to Zambia. The assumption that all students will enter the large business leads to cultivating attitudes in students of looking down upon the small business

sector instead of viewing it as an alternative '<u>way of life</u>' or '<u>career</u>'. Those who join the small business are regarded as failures in life. They in turn become stifled to any suggestion of education as they become disillusioned.

This can partly explain why some small businessmen detest the thought of management training or education in the U.K. as Watkins found. He attributed the discrepancies between training needs and readiness to undergo such training schemes, which he calls breakdown in communication, to the roots which

> "are deeply embedded in the education and training system of the U.K. In general, the people who do well at school in "academic" terms stay there, go on to further and higher education and then into bureaucratised large-scale organisations.

He continued, many of the balance "gravitate to smaller scale businesses", where eventually some of them inherit, buy or start a business of their own. He further stated that by that time, the "mistrust of formal education is deeply rooted".

Ettinger and Fromont (Spring, 1985: 57) also protested against the modelling of all management training, in higher institutions, "whose organisation and content of the taught disciplines" are based on large businesses "when they do not aim to train chief executive officers" for the same businesses. In their preface to the evaluation of the 1985 Graduate Enterprise at the University of Stirling, Menadic and Hale also observed:

> ... most students leave higher education with little awareness of the career potential of business formation, and ill equipped to utilise their academic knowledge and skill in a way that will benefit society and the economy as a whole".

They therefore advocated to

> ... aspire towards the changing of attitudes within the education sector and work to integrate the programme [Graduate Enterprise] into the normal curriculum

This is viewed as the best way of accomplishing the basic mission of Graduate Enterprise which is to "encourage enterprise as a way of life" in the higher education sector, contrary to the traditional view that careers can only be made in government, the professions, or big business (Hale, 1984: 1).

Some educational institutions have however been reported to show less enthusiasm in this approach arguing that the areas covered in small business courses are best covered in other subject-based teaching such as business policy, general management or economics. The problem with this view is that such courses do not deal with small firms but "simplified 'large' firms", rendering them inapplicable and unsuitable (Ball and Gilligan, 1985: 65; Faulkner, 1987:4). Similar findings have been reported by Birley and Gibb (1984).

However, other educational institutions have started offering such programmes even at postgraduate level, in response to criticisms such as those highlighted above and in some cases in realisation of the importance and need of providing management education and training. Mary Ball and Colin Gilligan (1984: 62-65) reported that at least 14 universities, and 6 polytechnic institutions, especially universities teaching general business courses at undergraduate level now offer small business courses in U.K. Most of these started after 1980.

Some universities such as University of Stirling's Business & Management department; and Durham Business School have introduced specialised small business programmes aimed at graduands, with an interest in starting a business firm. At Stirling University, these include Graduate Enterprise and an

M.SC. degree in entrepreneurial studies, was introduced in 1985. Graduate Enterprise, a brain child of Professor Cannon (1985: unpaged), at the University of Stirling, was initiated in 1983 when the first participants were enrolled. It's basic purpose is "to encourage enterprise as a way of life" in higher education, among final year students, and graduates within two years of graduation, (Hale, 1984: 1; Menadic, 1986: 2). It is worthy noting that there has been a growing importance attached to and interest in the Graduate Enterprise programme (GE). The concept has now spread to the rest of Scotland where all the 8 universities who were initially invited to participate, joined the scheme in 1983 (1984: 3). The following year, nine higher educational institutions and colleges were also invited and joined as participating members (1985: 4). Further, in Britain, the concept of Graduate enterprise has spread widely to other educational institutions such as Durham, Warwick and Ulster Universities; and Cranfield Institute of Technology and Lampeter College Wales. These offer equivalent programmes. Still further, the programme has been widely adopted abroad. Hence information has been sought by or link have been forged with countries such as Australia and many other European countries (Menadic and Hale, 1986: 4).

Other agencies at local and central government level and private organisations are also concerned with providing training and consultancy in the U.K., thus providing an extensive programme for the country as a whole.

There are therefore a lot of lessons for Zambia to learn from developments in U.K. in the provision of management education and training.

2A.7 Summary

To recapitulate what has been said up to this point in this section, first, it was pointed out that three major issues require the attention of small business policy makers:

1) Entrepreneurship theories showed that there are several approaches to becoming an entrepreneur. Policy makers can encourage small firm development by adopting appropriate pull and push variables
2) Determination of the role of small businesses to assess whether they need support and if so what support would be given
3) Identification of the small business target audience; and provision of both management and education training to them instead of concentrating on the training of small businessmen only
4) There have recently been increasing awareness and calls to integrate small business education from primary to university levels in order to prepare students, who are the potential small businessmen, for alternative careers in the small business sector as opposed to the traditional view of preparing them for government and large businesses.
5) A number of educational institutions have responded to these needs.

Table 3A.1 Growth of Wage Employment During the SMDP (1972-76)(in '000s

Sectors	1971	1972	1973	1974	1975	1976	change in employment 1972-76
Agriculture, forestry and fishing	39	31	32	36	34	33710	-6
Mining & quarying	30	6	6	65	65	66	+8
Manufacturing	42	43	44	44	44	42	0.3
Electricity and water	4	3	3	3	3	6	+3
Construction and allied repairs	66	72	70	75	72	55	-11
Distribution, Restaurants and Hotels	37	34	35	36	33	33	-5
Transport and communications	23	25	24	22	22	20	-3
Finance, Insurance and Real Estate	11	14	15	16	19	18	+7
Community, Social & personal sevices	85	83	87	93	90	95	+10
All industries	366	368	373	385	393	368	+3

§Except for the year 1976, the figures of Wage Employment for the quarter ending 31st December. The figures for 1976 are average for the quarter ending June, 1976,as given in Monthly Digest of Statistics, Nov.,-Dec.,1977. 1976 figures are provisional.

Source: MCDP,1979:55, table V.1

Table 3A.2 Distribution of Projected increase in Wage-paid Employment in the TMDP § by sector for 1976 and 1983 (in '000s)

Sectors	Assumed rate of growth in employment	Estimated employment	
	%	1976	1983
Agriculture (commercial) ...	2.5	34	40
Mining ...	1.5	66	73
Manufacturing ...	7.5	42	66
Electricity ...	2.5	6	7
Construction ...	4.0	55	71
Transport & communication ...	3.7	20	25
Commerce ...	6.0	51	74
Government services ...	2.5	93	112
Total ...	3.8	369	468

§Provisional figures of employment for 1976 have were used as base because 1977 figures were not available. In view of the fact that the 1977 level was expected to be lower than that for 1976, because of deterioration in econo-mic situation, there was to that extent an element of over-estimation in the projected level of employment for 1983.

Source: MCDP, 1979: 55, table V.1.

Table 38.3 Employment Distribution by major Industrial Division for selected years 1964-1988 (in '000s)

	1964		1968		1973		1979		1980		1985		1987		change 1972-87
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	NO.	%	
Agriculture, forestry and fishing	33	13	33	10	36	9	32	9	33	9	35	10	33	10	4 13
Mining & quarying	52	21	59	17	69	17	62	17	63	17	57	16	56	16	-5-08
Manufacturing	21	9	33	10	44	11	49	12	48	13	48	13	49	14	6 14
Electricity and water	2	1	4	1	3	1	8	2	8	2	8	02	9	03	4 80
Construction and allied repairs	40	16	64	20	72	18	42	11	44	12	29	08	29	08	-43-60
Distribution, Restaurants and Hotels	22	9	33	10	33	8	37	10	31	8	28	08	29	08	-9-15
Transport and communications	12	5	24	7	22	6	25	7	24	6	24	07	23	06	-2-08
Finance, Insurance and Real Estate	00	0	8	2	19	5	20	5	23	6	23	06	22.06		8 37
Community, Social & personal sevices	64	26	66	21	90	25	104	28	106	28	109	30	105	29	22 27
Total employed	248		317		393		374		379		362		357		-11-03

Source: Central Statistics Office
Monthly Statistics, Apr.,1983: 10-11, table 1.2
For years 1985: MCBP, Dec.,1986, table IV.6; 1987:
MCBP Jan., 88 table IV.1
Figures may not add up to totals due to rounding.

CHAPTER 5 APPENDIX 1 METHODOLOGY: I RESEARCH DESIGN AND ALTERNATIVE METHODS OF COLLECTING THE INFORMATION

5A1.1 INTRODUCTION

The aim of this appendix is basically two-fold. First, to explain the type of research design selected, the factors influencing the choice and type of data required. Second to present the alternative methods that were possible in collecting the information and justify why particular methods were adopted. This also required to clarify the scope of primary survey. That is description of populations and sampling methods, sampling design and alternative survey methods chosen and reasons for doing so.

5A1.2. TYPE OF APPROACH TO RESEARCH AND RESEARCH DESIGN

5A1.2.1 TYPE OF RESEARCH

Understanding of the possible types of approach to research was important in order to determine an appropriate method for the research problem.

There are two extreme types of approaches to research, theoretical and action oriented. These are further divided into pure basic, basic objective, evaluation, applied, action and the new 'paradigin' research (Bennet, 1983: 34-37). The determinant criteria of the category for a particular research are three. First, to decide whether it is concerned with clarifying and resolving theoretical issues or with solving a practical problem in one enterprise. Second, to resolve the method of disseminating

and diffusion process of the results learned journals or reports to sponsors). Third, to settle the involvement level of the researcher with his audience.

Pure basic research aims at enhancing knowledge and understanding of the world around us through resolving, illuminating or exemplifying a theoretical issue. Basic objective research aims at providing an answer to a general problem of how new knowledge may be applied. This research study was concerned with this type. Evaluation research is concerned with assessing some aspect of the performance of an enterprise where the sponsors receive specific results although they may be published in professional journals as illustrations of the use of the new technique. Applied research involves solving a specific practical problem within an enterprise or sponsoring organisation. Action research aims at tackling problems relevant to theory and to report the findings to sponsors, scientists and practising professionals through reports and professional journals. The newest approach to research is 'new pradigin' research aimed at studying persons and relations between them being researched, who can decide how and what form research would take.

5A1.2.2 FACTORS INFLUENCING RESEARCH DESIGN

Since the research study was concerned with a general study of the performance of small business firms and not a particular problem with an enterprise, the type of suitable research design determined was one that has more external validity than internal validity. This therefore, ruled out laboratory experimenting, controlling or manipulation of the subjects. External validity, however, depends on three factors: Representativeness of the

sample, experimental artificiality and reactive effects of testing. Detailed discussion of research design is beyond the scope of this study. It is however, worth mentioning that for this study correlational designs or cross-sectional studies was determined to be the most appropriate. It is one of the five types of quasi-experimental designs. Correlational design aims at studying the property-disposition relationship through a field survey. It was chosen because the objective was to find explanations as to why there were differences and similarities, if any, in employment creation between small and large businesses since 1985 and since the introduction of the government policy in December, 1982. The study also sought to find out associations, if any, between dependent variables and the independent variables such as incentives, education levels, experience or age of businessmen among many variables.

The other quasi-experimental design methods were not suitable. The one shot case study lacks external validity since it concentrates on one unsampled system after an event. Therefore, relating its results to the rest of the population, which was the focus of the research study, was not possible. It was therefore used as supplementary to explore and stimulate fresh ideas and insights into the field of small business. This was restricted to small businessmen supporting organisations to supplement information on findings relating to small scale sector. But it was also used with businessmen themselves where interesting topics were raised or where clarifications on issues were sought. The non-equivalent control group design was not suitable since it requires before and after measurements.

The pretest-posttest control group experimental design, the Solomon four-group design and the one-group pretest-posttest designs were all not suitable since they involve manipulation of subjects, random allocation, pretest and posttest measurements, all of which were not possible with small businessmen. In addition, the study was concerned with 'an after the fact event' which made pretesting of businessmen impossible. The posttest only control group experimental design requires matching of two groups, one of which is not exposed to the variable of measurement, which was again out of the question since small businessmen could not be matched (common variables were unknown). Further, all of them had been exposed to one or more variables of interest. Although the statistic group comparison experimental design does not require matching, one of the two groups should be exposed to the experiment whole the control group should not, which was not possible.

5A1.3 REQUIRED PERFORMANCE DATA

Dependent performance measures of small business success were both economic and sociological / psychological measures. The economic measures involved two main ones. First, financial and in particular total fixed assets per job. The second economic main measure was non-financial, namely a) proportion of new firm formations, b) growth i.e. change in firm size based on number of employees. The sociological / psychological measures were attitudes by SBIS students and graduates towards working in small firms, and attitudes towards leadership code. Others were SBIS respondents' views towards SBIS degree programmes, periods of working in small firms and preparations for business start ups.

The independent variables were:

a) Businessmen's parental background (education, career, experience)

b) Business owner variables including education, age (present and before forming the firm), past and present job experiences. Others were capital for start ups, enterprise founder related variables such as business inheritance, bank loan acquisitions, SIDO's assistance received etc.

c) SBIS students and graduates including year of study or graduation, sex, type of intended or actual degree major.

5A1.4 ALTERNATIVE METHODS OF COLLECTING THE INFORMATION

There were, three methodological problems to be resolved as is common in surveys. The first was deciding from whom the information was to be collected. The second was determining the methods that were appropriate to collect the required information. Third, how the processing, analysis and interpretation of the data had to be done (Moser and Kalton, 1971:53). This section addresses itself to the first two issues. Field work experiences in collecting the information and the methods actually applied in administering the three surveys for students, graduates and businessmen are documented in chapter 5. The third issue was dealt with in chapters 6 through 10.

5A1.4.1 SCOPE OF METHODOLOGY

The research used both primary and secondary sources of information. The later was useful in three main ways (as it has already proved to be): First, background (chapters 3 and 4 unemployment problem and role of Government in small business policy respectively) which described the Zambian society characteristics; Second, the small firm definition (chapter 1 appendices 1 and 2); and third the theoretical concepts (chapter 2 appendix - 2A). The main research used primary data. The reason being that in Zambia, there are no agencies which can provide business data on the variables of interest.

5A1.4.2 SCOPE OF PRIMARY SURVEY

Populations from whom the information had to be collected and the target populations from whom the information was sought, the sample actually picked for providing the information had to be decided upon. The methods applied in the field had to be determined before data collection.

5A1.4.2.1 POPULATIONS AND SAMPLING METHODS

5A1.4.2.1.1 Target and Survey Populations, and Samples

5A1.4.2.1.1.1 Target Populations

Determining from whom the information was to be gathered required defining the target population for which information was required and then the survey population - the ultimate population actually covered. This required fixing limits other than only geographical. The target populations were private small and large manufacturing businesses; and potential small businessmen (i.e.

SBIS students and graduates). The next issue was how these populations were to be identified to satisfy the definitional requirements.

5A1.4.2.1.1.2 Survey Populations

Although the target populations were the small and large businesses in the manufacturing sector, there was a need to contact 23 key institutions of selected survey populations which support small businesses to obtain information about the later. These were SIDO, SEP, BOZ (small business section) and headquarters of ten banks, existing in the country at the time. The third major survey population was the SBIS students and graduates.

5A1.4.2.1.1.3 The Samples

The sample was a subset of the target population that was actually selected to provide required information.

5A1.4.2.1.1.3.1 The Sampling Unit

The sampling unit for business firms was a small and a large manufacturing business establishment in a town. When calculating employment creation, an enterprise unit was used in classifying between large and small firms. An enterprise was preferred to a single establishment since the former gives more accurate picture of the number of jobs, created by small businesses, which belong to the small sector if the total number of employees of the consolidated company enterprise does not exceed a definitional number. The reasoning was that using an

establishment as the base would include some jobs created by small businesses owned by large businesses. Such jobs, found to be about 15% in U.S. does not, it is argued, belong to the small but large sector (SBA, 1983: 63-64). It was not possible to get accurate employment data for the entire enterprise over long periods of time say 15 years due to lack of standard data sources such as Dunn and Bradstreet available in western countries. When calculating employment creation, it was therefore decided to base it on an establishment where data was available. But when comparing employment creation between small and large firms, the enterprise unit as per definition of 50 employees limit in all establishments was used as a cut off point. In this respect, the employment creation capacity of small firms with more than one establishment may have been underestimated compared to large firms.

The Sampling unit for the potential small businessmen was a first, second, third, or fourth year student; or graduate from Copperbelt University from 1980 to 1985. SBIS students and graduates were selected since they were business majors. It was assumed that they could have more inclinations and interest in starting businesses than others from the School of Environmental Studies or from other schools at the University of Zambia, Lusaka. University students and graduates were selected as opposed to students and graduates of other educational institutions in order to gauge whether there was potential for encouraging business formation through Graduate Enterprise Programmes which are popular among universities in the U.K. There was also a need to get a large sample in order to relate the results to the population. Further contacting non-university

respondents would have been virtually impossible without a sampling frame. This proved difficult even with university respondents.

The three types of sampling units and several small business intermediaries were used because, as other researchers have realised, a small business is a "complex social reality". There was therefore a need to get a complete picture regarding stimulatory policies and practices in Zambia. As Curran (1978:49) has also noted:

> A single research strategy which seeks data from the focal group alone cannot adequately explore [emphasis mine] this complexity or adequately test hypotheses concerning social relations with others.

It was, for example, necessary to find out the banks' lending policies to small firms. Likewise, it was useful to learn about the promotional programmes of SIDO and SEP. The SBIS attitude survey was helpful in understanding or knowing the predispositions of graduates towards selecting small businesses as career alternatives. This was to be useful in determining whether offering small business options concentrating on entrepreneurship or small business development, as suggested by Easton (1977:44) would be beneficial to graduates later in their career in being instrumental in graduate entrepreneurial formation. Knowing their attitudes towards owning businesses would also be helpful in determining where efforts would be best directed in these programmes.

The limitations of attitude scales to directly predict "overt behaviour" were however recognised. These weaknesses arise because "behaviour does not have a simple one-to-one relationship with one type of inner determinant" (Oppenheim, 1984: 152).

Behaviour depends on a lot of factors such as temperament, character or traits and all the environmental factors (see chapter 5 appendix 2.9 (5A2.9) for details). But knowing SBIS graduates' predispositions would help in making policy decisions later regarding whether or not management education and training could be provided and if so which types.

5A1.4.2.1.1.3.2 Sample Size

The sample size determination for private manufacturing businesses was based upon cost and practical limitations. However, sample sizes for the three main questionnaires for SBIS students, graduates and businessmen were decided upon when the researcher went for field work in Zambia since total populations were not known before fieldwork. The selection process used in the field is fully described in chapter 5 which deals with data collection fieldwork experiences.

5A1.4.2.1.2 Sampling Design

5A1.4.2.1.2.1 Sampling Process

Three stage stratification type of sample design was used for selecting business firms in the towns of interest. It was referred to as stratified sample because, in a lay man's language, the total population of target firms was divided into two categories (or strata). These were year of formation and town of interest. Stratification sampling design was chosen for purposes of convenience and saving of time, energy and money. Simple random design gives a known equal chance of each member of the population to be selected. But it was not used since no

sampling frame, comprising a list of all small and large manufacturing business organisations in Zambia, existed but a partial list. Second was the need to have each of the three towns of study correctly represented according to the size of population. This increased the precision of the estimators and provided unbiased estimates (see chapter 5.5.5.4.3..1 for detail). Third, even if a list for the total population was available, it was deemed unwise to use it in sampling an area whose size is three times that of the U.K. since all small business firms of the sample would have been thinly spread over all the districts and towns. It is in fact for this reason that only three towns (Lusaka, Ndola and Kitwe) were selected. Lusaka was from the Lusaka Province and the last two were from the Copperbelt Province.

First stage stratification involved dividing the provinces according to districts. With a main town centre in each district this resulted, for the urban area, in ten towns (see map of Zambia in chapter 5 Appendix, Exhibit 5A5.4). But for practical purposes, only the three towns indicated above were sampled to get the required sample size. The decision to choose these areas was influenced by the need and value of the findings in generalising the results. In turn the factors that were found to be important in these areas were the geographical positioning, economic activity and human population. Although Lusaka is basically a commercial centre, it was chosen because of its high contribution to employment (40% in the manufacturing sector in 1980), being the capital city and its high population (about half a million). Ndola and Kitwe in The Copperbelt province are the main industrial and manufacturing towns of Zambia. Further more,

the two towns contribute about 50% (23,770) to total employment in the manufacturing sector (CSOL, April, 1983:18). Still further, out of urban population of about 2,440,400, the copperbelt accounted for about 1,248,900. Kitwe's population was about 314,600 while that of Ndola was 282,440 (CSOL, July/Sept., 1984:3). In addition, these two provinces are close together which made it easy for commuting between the two areas when stationed in one area.

The Second stage in the stratification process involved sampling the actual business firms not from the entire district or town, but restricting the exercise to town centres and in particular to zoned industrial sites in each town centre and periphery areas. This formed relatively manageable clusters.

The third stage called for sampling the unit of interest of firms from each cohort year of interest (i.e. ten, five, three, two and one year cohorts).

The sample plan for the potential small businessmen, was a systematic sampling procedure. A sampling frame was derived from university records for the students and from graduates' replies to an initial request for their present addresses, using their previous contact addresses provided at the graduation time.

5A1.4.2.1.2.2. Sampling Frame

There was no readily available sampling frame for small and large manufacturing businesses. It was determined that Telephone directory could not identify small manufacturing firms as some of the firms in the directory might not be engaged in manufacturing. SIDO, chambers of commerce, trade directory, or

Small Scale Industries Association of Zambia (SSIAZ) membership list was deemed to be incomplete and therefore inappropriate. The major objection was that some organisations might not be members since membership was not obligatory. Registration as a small business under SIDO Act section 18 is not mandatory either.

The initial idea of using Value Added Tax (VAT) register, while superficially attractive, but a useful source this kind of information in U.K. and U.S.A., was discarded because of its disadvantage of excluding very small business units. Only firms with minimum sales value of K10,000 are required to register. Since registration is not compulsory for small firms below this limit as per Sales Tax section 7 the sampling frame could have produced a biased sample (although the proportion of firms in this category was not known). Second, there was no guarantee that data would be arranged according to the three towns of interest and according to year of formation. Third, as Stewart and Gallanger (1985:45) also admit in using Ganguly's published VAT data, death of firms simply theoretically "refers to when a firm's turnover falls below this [minimum] figure". Therefore the methodological problem of being unable to record employment lost through closures could not still be solved. This was so because using such sampling framework would certainly have excluded firms which were existing, assuming that they were dead. This could a serious error where many small firms deregister due to perhaps to some economic recession.

It is due to these types of complexities that some researchers have admitted that calculating closure rates is "an issue where reliable data are notoriously lacking" (Scott, 1982;

Scott and Ritchie, 1984). Suggestions of follow ups when using interview method (Mason, 1985:33) to estimate closure rates, have not produced any fruitful results. Tracing owners in small firms that have ceased trading is an impossible task. This has indeed forced advisers of such procedures such as Mason (1985:34) to make

> no attempt ... to contact the founders of companies that had ceased to trade in the period between the surveys.

Lack of sampling frame and company failure data is however not such a serious problem in developed countries such as Britain and U.S.A. as it is in Zambia. Dun and Bradstreet, the largest credit rating organisation in both countries publishes failure rates. But even in this case, it is criticized because the computerised data base is not complete and information is collected for commercial purposes, the result is not a "particularly scientific sample" (Your Business, June, 1985: 14). Birch (1979:8) also complained that "many corporations are not included" because the file was not intended to be a census of the corporate population. He narrated the difficulties he encountered relating to:

1) coverage (not all firms are included, it is a sample, not a census);
2) biases inherent in the reporting system perfectly good for Bradstreet purposes. But not intended for studying economic change. When a firm is bought or merges or is incorporated, it is regarded as a new firm.
3) Clerical errors although great care is taken and supervision is close
4) Misrepresentation of information provided to reporters by corporations because not all firms have an interest in

telling the world about their exact position. One corporate President told Birch that he had never told D & B the truth. When his firm was small, he wanted it to look bigger by inflating estimations. But when it grew rapidly, he did not want "others to be aware of how fast he was penetrating his market place, he deflated his estimates".

Gallagher's study based on this sampling frame has therefore been questioned since his sample was "weakest in the very small company sector" (Your Business, June, 1985: 14). On misrepresentation Birch however argued this special surveys and other forms of validation are subject to the same errors as D & B. He argued that a corporation was in fact more likely to distort its position to a researcher or government agency, in whose work it has little stake than it is to mislead D & B who upon discovering the distortion, could alter the company's credit rating and hence its ability to stay in Business. In the U.K., the Department of Trade and Industry's company register shows published compulsory and Credit Voluntary liquidations which may partially solve this problem (Stewart and Gallagher, 1985: 42 & 45).

In the case of this study, since cohorts of firms formed in a particular year was of greatest interest to this study, there was little choice but to use a register of company formation for corporations from the Registrar of Companies and Business names of the Ministry of Commerce and Industry. This was the best standard source of data available although it had some constraints too, which paralleled with VAT registration. One of the anticipated problems was that very small firms may not

register. However since they are legally required to register in order to obtain a manufacturers and trading licences it was thought a great proportion of firms would be included.

Another difficulty was that under the Companies Act, a company is not required to state its registered office. The only requirement is that upon commencement, the residential address where the company may be contacted should be provided. The address may even be that of one of the shareholders or a lawyer, not necessarily where it carries its business. Contacting companies could therefore have proved difficult. The Business Names Act (Cap. 667) requires proprietorships, partnerships and corporations which do not operate under the real names of the proprietor, to register the names under which they operate. Among other things, required to be provided are business names, nature of the business and principal place of business. This therefore implies that very small manufacturing sole proprietorships operating under the trues names of the proprietor, a common feature in the small business field need not register the business name with which they operate. Again identifying such organisations could have proved difficult. Therefore since the registers of companies and business names were certainly incomplete, it was initially decided to supplement with Central Statistical Office manufacturing list, SIDO membership list, businesses which have received assistance from SEP, SSIAZ list, chambers of commerce at district level and VAT registration list. (For the sampling frame finally adopted in this study refer to chapter 5).

The difficulties of obtaining sampling frame (and the procedure, outlined of getting a composite a series of sources though unrepresentative) should not surprise those who have experienced the difficulty of insufficient information in the small firm sector. This is particularly necessary for selection of respondent firms, and especially at the lowest level. Boswell (1970:10) noted:

> ... there is no lack of friendly trade associations, quasi-official bodies or efficiency-promoting agencies ready to help with lists of firms to approach, or actual introductions.

He further stated that apart from the possibilities of "embarrassment" and the "danger of being led towards samples which are themselves slanted" resulting in a biased response, they "may be great". Other researchers in Britain and USA such as Curran (1978:63-64) have reported using such methodological approaches where it was the only available alternative. In Curran's case, after failing to find a proper sampling frame he determined the list of possible firms, for his thesis, mainly from

> personal contacts, senior executives of local firms in the industry, a local productivity association and local industrial Liaison Officers

Wash (1980:8) ended up using a list of three large companies and 25 small suppliers. One of these large companies supplied names of purchasers considered to be bad while another provided those it considered to be good. In Zambia, ILO/SATEP does not, in several cases, use any sampling frame at all, in its research studies on employment in the informal sector, because of problems of obtaining them especially in this sector. Research assistants are merely "asked to locate as many manufacturing and repair activities as possible" (Haan, July, 1982:19-20).

There was no problem in identifying and contacting small business supporting institutions. Sampling frames for SBIS students and graduates were also easy to get from the University student record files. But addresses for graduates were not current leading to a higher non response rate (see chapter 5.4 which deals with administration of the questionnaire).

5A1.4.2.1.2.3 Sampling Selection Process

Once the lists had been derived, a systematic sampling procedure of selecting every 'nth' interval businessman or SBIS student / graduate out of the total was used. For the procedures used, refer to chapter 5.

After successfully determining the populations and identified the sampling populations, the next concern was determining the best means of reaching each individual businessman, financial institution, supportive organisation and SBIS student / graduate to obtain the required information in order to answer the problems regarding the small firms sector.

5A1.4.2.1.3 Alternative Survey Methods Chosen and Reasons

5A1.4.2.1.3.1 Determining the Methods

The possible appropriate survey methods suitable for the research design were first, the postal questionnaire survey. The second was the personal interview. This may be sub-classified into the schedule standardised interview, the non schedule standardised interview and the non standardised interview. The first of these sub-classifications requires identical wording and sequencing for all respondents. The next one is flexible enough

as wording and sequence may be changed to suit each respondent. The last one is the most flexible since there is no standardised format or setting, but each person is treated differently.

The third possible method was telephone interview. The fourth alternative was observational, and the fifth was documentation. Documentation may be government official data sources giving information about sampling units. It can also be personal documentation (diaries from informants).

5A1.4.2.1.3.2 Data Collection Methods Chosen

It was not possible to use one method in this research study because of the differences in the information sought and the survey populations. A combination of three main methods, supplemented by three other methods will be used in collecting data. The main methods were first the schedule standardised personal interview to collect data from businessmen. Second, the non schedule standardised interview for collecting information from the Central Bank, SIDO, SEP and financial institutions. Third, Likert scale mail questionnaires to measure attitudinal predispositions of SBIS students / graduates on small business, government policy and assistance provided.

These three main methods were supplemented by first brief telephone interviews where feasible in identifying small businessmen and making appointments. But this was a low key due to telephone communication problems as discussed in chapter 5. Second, observational method, was used on a very small scale in being alert and observing through eyes, ears, voice, when interviewing the small businessmen just in case something

interesting happened incidentally. This was found to be the case on leadership code (see chapter 5 on fieldwork exprienses). Third, documentation method was also applied by using official government statistical publications such as Monthly Digest of Statistics, in the preliminary stages, already relied on to a very great extent. This was also used at the analysis stage when comparing research results with government published statistics for example on urban population concentration mobility and population educational levels.

5A1.4.2.1.3.3 Reasons for Choosing these Methods

1. Personal Interview

Personal interview was chosen over postal questionnaire in contacting the small businessmen for three major reasons. First, there was a need to increase the response rate since small businessmen are normally very busy people, involved in both operations and management. This makes it difficult for them to spare their time in completing postal questionnaire (Stewart, 1978:23; Moser, 1971). In addition, since this was a privately sponsored survey and not an official government or SIDO survey respondents might not have felt obliged to participate. Another important point on possible poor response rate was that research surveys are not common in Zambia and therefore some people are suspicious of such enquiries. Therefore, personal appeals and assurances were found better than promises of confidentiality and anonymity in a covering letter to a questionnaire.

The second major reason was that it would be easier to clarify ambiguous questions with a personal, face-to-face interview than with a mail questionnaire where the answers are

final. Hence it was hoped that there would be fewer blanks since omissions would be checked at the end of each interview. This was necessary especially since the field research took place overseas during a short period only. This made it difficult for reinterviewing if there were incomplete answers.

The third main reason was to get more information than would have been possible through a mail questionnaire. An informal approach was used by the researcher in order to raise other questions not necessarily included on the scheduled standardised questionnaire, which might prove useful. Research assistants were, however, required to adhere to the schedule standardised questionnaire. But they were encouraged to record incidental additional useful information given, but not probed for.

2. <u>The Schedule Standardised Method</u>

The schedule standardised was preferred to the other two, in collecting information from businessmen, because of the need to record the same responses, find aggregates, compare and relate the results to the rest of the small businessmen target population. Uniform answers, relating to attitude and opinion questions, can best be generated through asking the same questions of a Likert scale type. The other reason for choosing the schedule standardised was to avoid interviewer bias which is prevalent in the other two since the interviewer would determine the form of the interview, the questions raised and the details recorded. That was certainly not possible since research assistant were engaged.

3. Postal Questionnaire

The second main method was postal questionnaire administered to SBIS students and graduates. Initially students were to be personally interviewed while at the campus since that could have reduced the costs and could have been more valuable for the same reasons given above for businessmen. But as explained in chapter 5, since the university was closed at the time of field work, students had to be sent questionnaires as in the case of graduates.

A postal questionnaire was found attractive and the only available feasible method for graduates because they were scattered throughout the country and overseas. It was impossible to conduct personal interviews regardless of its benefits.

4. The Non Schedule Standardised Method

Information from small business supporting agencies was collected through a non-schedule standardised questionnaire. A number of open ended questions were asked to all respondents by the researcher only. Probing was however done to solicit information on new ideas which were not covered in the main questions. Respondents talked freely although they were guided by the prepared questions. This method was opted for because of the insufficient number of respondents anticipated to be covered rendering any statistical analysis out impracticable, but content analysis. In addition insufficient prior knowledge existed regarding the role of small business supporting agencies.

5. Telephone Method and Documentation Methods

The reasons why telephone, observation and documentation methods were opted for have already been explained above. It is perhaps only necessary to clarify that, in this study, observation did not refer to participant observation method where the researcher becomes part of the subjects by sharing in their lives and activities, usually applied in anthropology. It could not be done successfully in this study since the researcher could not become a businessman or observe what each and every businessman was doing.

6. Time Span for Field Work

The research field work was planned to take five Months, from June 1986 to October, 1986. The period was determined to coincide with the University's long vacation when student research assistants were to be free to assist in interviewing businessmen. The first few weeks were spent on preparation of sampling frames, conducting interviews, holding discussions with officials from various institutions. Questionnaires to SBIS students were to be administered at this time before students left for the long break. This was to be followed with administering of questionnaires to supporting agencies and university graduates.

The actual total time taken for field work was seven months. But efforts to receive completed questionnaires from U.K. respondents continued upon returning to Stirling resulting in eight months for the total time taken.

The selected statistical data analysis approaches are next examined in chapter 5 appendix 2 (5A2) while chapter 5 diousses the methods of administering the survey experienced in the field.

CHAPTER 5 TECHNICAL APPENDIX 2 (5A2) - METHODOLOGY: II STATISTICAL DATA ANALYSIS APPROACHES

5A2.1 INTRODUCTION

The type of research design normally determines the type of data that is collected which in turn determines the statistical techniques to be applied. Therefore in arriving at the appropriate statistical analysis techniques for this study, reference was made to the purposes of the analysis which were in turn influenced by the research design. There are three basic types of data available. These were collected also for this research study, around which variables were generated. The data collected were based upon the research design which is discussed in chapter 5 appendix 1. The three types of data collected were:

1. Textual data
2. Categorical data and
3. Quantity data.

Before explaining each of the three types of data, it is important to relate data to a variable. The basic purpose of sampling units of a universe, is to obtain data in order to find out the extent to which all members of such a sample share some common attribute or characteristic of interest. This means looking at how they vary among themselves on one (or more) of such attributes of the data. These varying characteristics of data are therefore referred to as variable characteristics or in short variables. Variation in a particular attribute of data is therefore referred to as a variable and it is defined in statistics as (Rowntree, 1981:29):

"any attribute or characteristic that will enable [an analyst] to distinguish between one individual and another"

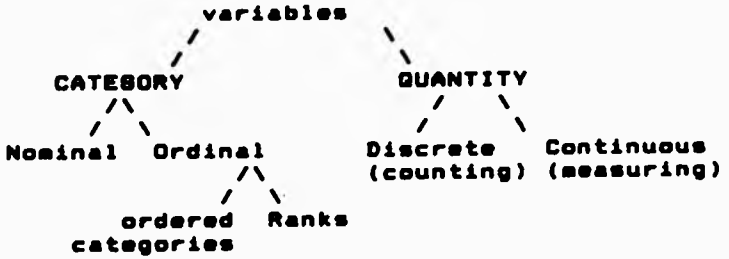
Since the variables are related to the types of data, there are two basic types of variables, which can be generated from the three types of data (since the first type of data can be transformed into the second type) namely:

1) categorical variables and

2) quantity variables.

These two can be sub-classified into the types of variables shown in fig. 5A2.1 below.

Fig. 5A2.1 Relationships Between Types of variables.



Source: Rowntree p.33

All the types of variables, except ranked variables, were found relevant in this research. These will now be explained along with the related data on which they were derived. Textual data is defined as data "which records a written or spoken description" (Howard, 1983:101). This is the kind of data that was collected from written responses to open ended questions in the student and graduate postal questionnaires. Spoken type referred to verbatim quotations given to open ended questions and

also provided as supplementary information to pre-coded responses by businessmen. The small business supporting agencies questionnaire relied entirely on spoken type. Textual data is said to be (Howard,1983:102):

> "rich and flexible but much attention needs to be paid to their content and meaning if they are to be properly understood."

Part of textual data was analysed through selected quotes. The other part was analysed through content analysis. This required reading through all the given verbatim responses to open ended questions and respondent's additional comments. Then carefully analysing the text so that occurrences of particular ideas were traced and pieced together. This process was then followed by transforming such similarities into categorical data and then analysed statistically for student, graduate and businessmen questionnaires.

Category data is data which "can be counted and cross tabulated" (Howard, 1983:102). It allows classification of data with similar characteristics into groups or categories. Thus variables associated with this type of data are referred to as categorical variables. This means "any variable that involves putting individuals into categories" (Rowntree,1981: 29). The two types of category variables, which were also used in this study, are called nominal and ordinal. Nominal (which comes from the Latin word, *'nominalis'*, meaning of a name) implies giving names to the different forms the variable may take. This type of variable formed the main basis of analysis for the three questionnaires for example education of businessmen.

An ordinal variable is an ordered categorical variable based on ordinal data. It is called ordinal because it is possible to identify a sample member who has more of a certain characteristic than another and can be arranged in order (Rowntree, 1981:30). Attitude scale variables on SBIS degree, working in a small or large firm and leadership code were of this type. Ranked variable involves sorting the ordered categories in more groups. It is based on ranked data.

The other major type of data is quantity data. It is based upon numbers and is therefore also referred to as numerical data. The reason is that numerical values can be given to each point on a scale (Howard, 1983:102). Quantity data can be of two types: interval or and continuous. The former is also referred to as interval while the later is also called ratio data.

One of the differences between the two is that interval data, on one hand, does not have a meaningful zero though it can be arbitrarily fixed. Continuous data, on the other hand, is referred to as ratio data because it has "...a meaningful zero point ...[and] individuals can be evaluated on [such] a scale" in terms of ratios (Howard, 1983: 102). The major distinction between the two however, is that interval data is counted. This is why it is referred to as discrete because "the possible values are clearly separated from one another and are not divisible in small fractions since they are only counted" (Rowntree, 1981: 32-33). But continuous data is measured since it is possible to imagine one value between two mentioned values (Rowntree, 1983: 33).

The types of variables derived from discrete data are called discrete variables while The types of variables obtained from continuous data are of course referred to as continuous variables. Individual members in this study were described in terms of how they differed from one another on a particular characteristic or variable. The types of quantity variables derived from interval data were such variables as "number of employees in a firm" where a graduate worked or which was owned by a businessman. As for quantity variables, this for example included age (un-grouped).

5A2.2 SELECTED STATISTICAL ANALYSIS TECHNIQUES

It is clear from above that since the objectives of the research design varied, the data collected also varied. As a result, the purposes of the statistical analysis had to differ. Hence the number of statistical techniques determined to be suitable for analysis and testing the hypotheses presented in chapter 2 were also wide ranging. The purposes of analysis, aim of the analysis and applicable major techniques were for this research were (Howard & sharp,1983:101):

purpose	Aim of the Analysis	Applicable Techniques
1. Description	concept formulation / classification	Factor analysis.
2. construction of measurement scale		uni-dimensional scaling
3. Generation of empirical relationships	pattern recognition	correlation methods.

source: partially adapted from Howard & sharp P. 101

The sub-classifications of the techniques adapted in the analysis were four as:

1) Descriptive statistics

a) measurement of central tendency. These included mean, median, mode, quartile and proportions.

b) measures of Dispersion, including the range, variance, and standard deviation.

c) (i) Differences of proportions between two samples (students and graduates) to determine whether there were differences in their responses. The Z-test was used to determine the acceptance region.

(ii) Differences of means between two samples (students) and graduates) for interval data. The Z-test was used to determine the acceptance region for the hypothesis that there was no difference.

d) (i) Differences of proportion for three samples, students, graduates and businessmen in order to find out whether the proportions were equal i.e. whether they came from the same population (categorical data). The X^2 test was used to test for significance.

e) One way analysis of variance (ANOVA) was used to

(i) test for the equality of the three samples: students, graduates and businessmen (interval data). The F-statistic was used to test for significance.

(ii) Student's t test was used to test for equality in creation of employment between large and small firms and year of formation (two variables).

f) Factor analysis was adopted to determine the factors that influence students and graduates to work in small and large firms. The same statistic was applied to leadership code items to find out the hierarchical endorsement of the statements. The relevant tests for suitability of the data for such a model were Bartletts test of sphericity, Kaiser-meryer-olkin measure of sampling adequacy KOM and correlation coefficient between factors.

2) Construction of measurement scales

Likert scale was used for Leadership code. Ordinary Pearson correlation coefficient was used for item analysis. Factor analysis supplemented Likert scale as described in 1 (f).

3) Generation of Empirical relationships

The main statistical technique used in all three questionnaires for the majority of variables was chi-square. The X^2 statistical test was applied to find out whether a relationship existed. Contingent coefficients, Cramer's V and Yule's Q were applied to test the strength of associations

To test for a quantitative analysis, i.e. whether the findings could be relied upon, it was decided to do the following where possible as normally recommended (Howard, 1983: 114-117):

1. Check for representativeness by comparing the results with information known about the populations that were sampled from government published data, where available since statistical theory relies heavily on the notion of random samples.

2. Check for reliability by using random split half testing which requires splitting the data randomly into two halves and then carry out the scaling operations on each completely separately for scale construction. The purpose of this advice is to avoid serious problems of reproduction. Results could be a figment of the data used and may disappear if other data were studied. The thinking in accepting this suggestion was that if similar results were achieved through split half, the results could be relied upon. For simplicity, each of the three main questionnaires were used instead of splitting. Then results were compared. This procedure is recommended for factor analysis and scales.

3. Check for missing explanatory variables for possible bias introduced due to important explanatory variables being omitted in the analysis. This was accomplished through separate analysis of late respondents for student and graduate questionnaire on a few critical variables to find out whether they were different. For longitudinal study of employment creation, the time factor was used i.e. year of formation as one of the dependent variables. The purpose was

that if it turned out to be an important explanatory variable, it could be a sign that other important dependent variables that had changed in a systematic way with time had been omitted from the study.

Each of the selected statistical techniques listed above and the procedures used to test the hypotheses will be described after the next section starting with the main one then followed by related tests and finally by minor techniques as:

a) Chi-square test (X^2- test)
b) Differences between proportions and means (Z- tests).
c) ONE-WAY analysis of variance (ANOVA with its F-statistic).
d) Student's t test
e) Factor Analysis (using Bartletts test of sphericity and KOM).
f) Likert scale.
g) Content Analysis

Numerical summaries and their corresponding interval estimates involving the sample arithmetic mean - $\bar{x}$, median, mode, sample standard deviation, standard error of the mean, quartile and range; sample proportion and standard error of the proportion form the basis of any statistical analysis. It should however be noted that they will not be specifically discussed here for lack of space. They will nevertheless be encountered in the process of explaining the other major techniques. The former are available in any elementary statistics textbook.

For interested readers, the most basic book written for laymen, which may be found useful is Rowntree (1981). For a more

applicable text for those in social sciences, see Erickson (1979). The text book that was found most useful, comprehensive, well documented, containing essential formulae only was Levin (1987). It also had flow charts to be used as an aid in selecting the most appropriate techniques. It is written for business management at an average level.

5A2.3 HYPOTHESIS TESTING AND STATISTICAL SIGNIFICANCE

Since formal hypotheses testing and statistical significance are common to the rest of the discussion on selected statistical techniques, it is pertinent, at this stage, to explain what these two terms mean.

An hypothesis is simply an assumption that is made about a population parameter, for example that the mean suggested salary of a leader by students is equal to the governments' stipulated population mean. A related one for all the three samples considered together was that the population average salary of a leader suggested by students, graduates and businessmen were equal. An hypothesis relating to proportions (percentage responses for categorical variables) was that the true population proportions of students opting for the Bachelor of Accounting Degree (B A c) and the Bachelor of Business Administration (BBA) among first, second and third year students were equal.

Hypothesis testing is objectively determining the validity of such assumptions or hypotheses by finding the difference between the hypothesized value and the value from the sample. Then a judgement is made on whether the difference between the

population hypothesized value and the sample value is significant. The smaller the difference, the greater the likelihood that the hypothesized value is correct since there is hardly a difference. The larger the difference, the smaller the likelihood that the hypothesized value and the sample value are equal (Levin, 1987: 368).

Research findings are normally reported with a possible error that can be associated with the results if readers will have confidence in such findings. The objective way of doing this requires setting confidence boundaries or confidence limits within which the calculated sample statistic will fall in order to accept a null hypothesis of no difference if the difference is too large to be ignored or to have happened by chance. The distance between the lowest and highest values or limits that can be accepted is referred to as confidence interval. It is "the range of the estimate" being made within which a value will be accepted (Levin, 1987:332). Setting confidence interval or limits around the hypothesized value necessarily means determining the confidence level at which the sampling standard error i.e. level of deviation of the sample result from the hypothesized value is acceptable. Statisticians have proved that this sampling standard error (of the mean or the proportion) is a good estimate of the population standard deviation (Levin, 1987: 321, 328, 336, 339). Further they have shown that the total area under the normal curve or distribution is 1. According to Chebysher's theorem, this area under the normal curve can be represented by standard deviations in such a way that the distribution contains (Levin, 1987: 121-2; Rowntree, 1981: 72-75):

a) About 68% of the values within plus and minus 1 standard deviation from the mean

b) About 95% of the values within plus and minus 2 standard deviations from the mean.

c) About 99% of the values falling in an interval ranging from 3 standard deviations below the mean to 3 standard deviations above the mean.

Since the standard error (of the mean or proportion) approximates the standard deviation, the area under the normal curve or distribution can be represented by the sampling error (of the mean or the proportion) (Levin, 1987: 330). It therefore follows that the percentages or proportions of values shown above can be represented within the same limits of the standard error (of the mean or proportion).

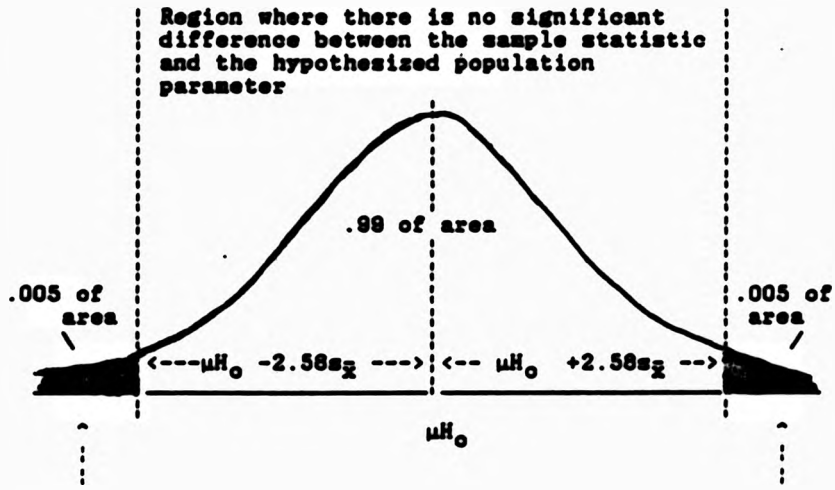
The standard error of the mean and the standard error of the proportion were treated the same on the foregoing discussion of the continuous sampling distribution or normal curve. But the standard error of the proportion is a binomial distribution. The reason for considering them together was that since the sample size was large, the normal distribution could be used to approximate the binomial distribution thereby conveniently enabling the use of the normal distribution table for determining the area under the curve (Levin, 1987:248-249). It is recommended that n be large enough for both n and nq to be at least 5 when the normal distribution is used as a substitute for the binomial distribution (Levin, 1987:339). The sample size must be at least 30 (Levin, 1987:347). This condition was duly met.

The proportions under the curve are also called confidence levels because they indicate the proportions out of one that are contained within certain confidence limits. In other words "the probability that we associate with an interval estimate is called the *confidence level* ... ". The *confidence interval* as stated above is "the range of the estimate we are making" (Levin, 1987: 332-3). For example to state that 99% of the values will fall within 3 standard deviations or standard errors is to be 99% confident that the value will be within 3 standard deviations or errors. It will have been noticed from the preceding discussion that the relationship between a confidence interval and a confidence level is that a high confidence level such as 99% will produce large confidence intervals, which are not precise since they are too wide thereby including in a wide range of values (Levin, 1987:332). In estimation, it is common for example to simply be 99% confident, implying that the probability is .99 that the value will fall within 3 standard errors.

When testing hypotheses, the concentration is not on the probability that the value will fall within the confidence limits, but on the probability that the value will fall outside the acceptance limits. This probability is referred to as the *significance level*, which "indicates the percentage of sample means [or sample proportions] that is outside certain limits" (Levin, 1987: 373). The reason why concentration is on the area outside the limits is that in hypothesis testing, the objective, as stated at the beginning, is "to make a judgement about the difference between [a] sample statistic and a hypothesized population parameter" (Levin, 1987: 373). This means that a

significance level of 1% or 0.01 (or 0.005 in each tail for a two tailed hypothesis) indicates that 99 percent of all the area under the curve is included in an interval extending $2.58s_{\bar{x}}$ on either side of the hypothesized mean. The Z-value of 2.58 can be determined from a normal curve table by adding both sides, each containing .4951. In 99 percent of the area, then there is no significant difference between the sample statistic and the hypothesized population parameter. By converse, in the remaining 1 percent (the shaded regions in fig. 5A2.2 and fig.5A2.3), a significant difference does exist.

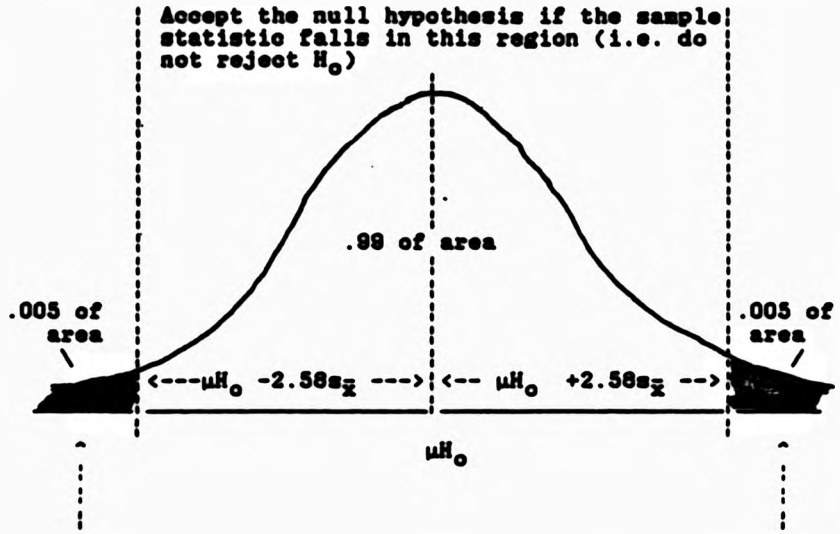
FIG. 5A2.2 Regions of significant difference and of no significant difference at a 1 percent level of significance



In these two regions, there is a significant difference between the sample statistic and the hypothesized population parameter

Source: modified from Levin,1987 p.373

Fig. 5A2.3 Hypothesis testing: at 1 percent level of significance, with acceptance and rejection regions designated.



Source: modified from Levin, 1987 p.374

5A2.3.1 SELECTED SIGNIFICANCE LEVEL AND ITS RELATIONSHIP TO TYPE I AND TYPE II ERRORS

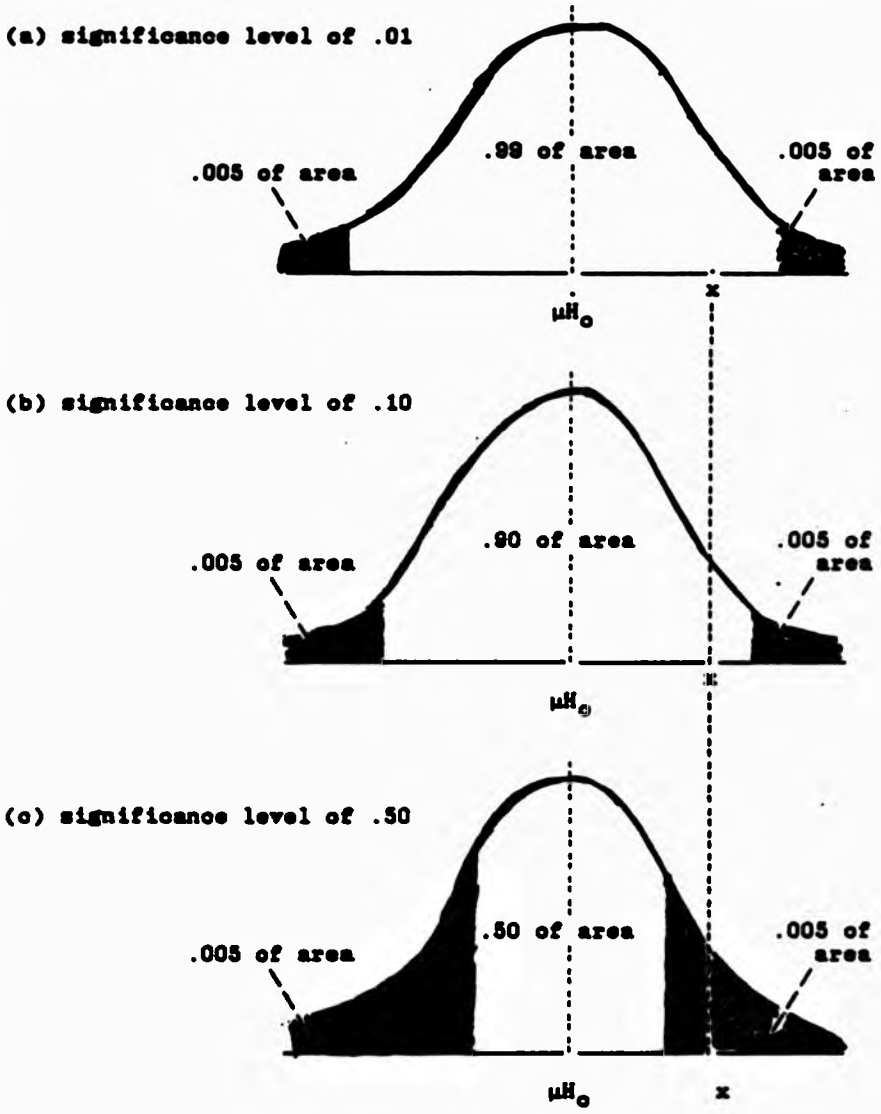
When discussing the relationship between confidence limits and confidence level, in estimation in the previous subsection, it was pointed out that a high confidence level results in fuzz estimates. The same analogy applies to selecting a significance level. Two important considerations were made before making the choice for a maximum significance level. The first was the risk associated with rejecting a null hypothesis when it was true (and the corresponding risk of accepting a null hypothesis when it was not true). Second was the common practice in social science investigations.

5A2.3.1.1 RELATIONSHIP OF SIGNIFICANCE LEVEL TO TYPE I AND II ERRORS

A selected significance level carries two opposite risks with it. "The higher the significance level" that is used for testing an hypothesis, "the higher the probability of rejecting a null hypothesis when it is true" (Levin, 1987: 374-5). This is illustrated in figure 5A2.4 where in part *a* the significance level is small at 0.005 and the null hypothesis of "no real difference" is accepted. But as the acceptable significance level increases, the acceptance region becomes smaller as shown in part *b* (where the null hypothesis is still accepted) until the acceptance level becomes so small and the rejection region so large that the same value of X is rejected in part *c* at a significance level of 0.50. This means that if the significance level is very high such as 0.50, the null hypothesis would rarely be accepted when it is *not* true but, at the same time, frequently rejected when it *is* true.

Rejecting a null hypothesis when it is in fact true is therefore referred to as Type I error. This means accepting that there is a significant difference (when there is none) and instead rejecting the null hypothesis of no real difference when indeed it is true (that no difference exists). Its probability, which is also the significance level of the test, is symbolized by α (alpha). Type II error is accepting a null hypothesis that there is no difference when it is false and a difference exists (Levin, 1987: 375, Rowntree, 1981: 119).

Fig. 5A2.4 Three different levels of significance



Source: Levin, page 375 fig. 9-4

5A2.3.1.2 SELECTED SIGNIFICANCE LEVEL AND REASONS

In arriving at how large the difference between the hypothesized value and the sample value should be in order to avoid the problems discussed above, the traditional conservative conventions of scientific research were followed. These demand significance levels that ensure a researcher is far more likely to fail to claim a result that (unknown to him) would have been justified, than to claim a result that is illusory (Rowntree, 1981: 121).

In the field of science such as engineering there is a great demand for high precision since the difference between the population hypothesized value and the sample value,i.e. tolerance level, must be very small before the later can be accepted. The acceptance region is therefore very small since the concentration, in most cases, is on avoiding Type II error.

The opposite is true in social sciences. The emphasis is not on accuracy in measurement. The aim is to achieve a significant difference. That is one that signifies a real difference in populations. The reason is simple to understand. There are a lot of sampling variations or errors particularly in questionnaire surveys. These arise from many different sources such as questionnaire design, response and coding errors, all of which cannot be avoided. Therefore sampling variation errors are not as serious as they would be in fields such as medicine where the consequences may be fatal. Therefore the emphasis in social sciences is on avoiding type I error.

Since the sources of errors are various, it was therefore mandatory , in this study, to emphasise on huge real differences in the population estimators before accepting the differences and rejecting the null hypotheses. This was so because a scientific researcher must avoid claiming significant differences where they do not exist. This therefore called for being more demanding by insisting on a high level of confidence. That was being cautious by demanding low levels of significance, before accepting that the difference between the hypothesized population value and the sample value was a real one and not merely arising by chance. This meant the difference had to be so large that there would be no option but to reject the null hypothesis. As discussed in the previous section, low levels of confidence produce large differences. For example to be significant at the 1% level (one chance out of 100 that the sample value would be significant merely because of sampling variation), the difference had to be bigger than if it were significant only at the 5% level. The emphasis was therefore on avoiding type I error.

After deciding that the significance level was to be low to avoid Type I error, the next issue was to decide on how small the significance level had to be for this study. Although there is no single standard or universal level of significance for testing hypotheses, reliance was made on the practices in the field of social sciences in choosing one. It was decided to adopt a 5 percent significance level as the minimum standard for acceptable probabilities. This level *'ipsofacto'* included lower percentages such as 1 percent since the approach of prob values was used. The former significance is commonly adopted in market research (Crimp, 1981: 47) while the later is used often in

published research results (Levin 1987: 374). Other writers confirm that "either the 5 or 1 percent levels" is used (Moser,1971:152). Rowntree (1981: 118) also states: "....two such 'cut off- points' are commonly used by statisticians. These are the 5% level and the 1% level..."

The following terms were applied in this study to symbolise differences that were significant at various levels (Rowntree, 1981: 118):

a) Significant - for differences at 5% level:

b) Highly significant - for differences at 1% level:

c) Very highly significant - for differences at 0.1% level

5A2.3.1.3 PROB VALUES

Although the highest significance level chosen for accepting real differences was 5%, in practice, calculation of probability values for testing the hypotheses was not limited to the three preceding significance levels. This was because the approach of prob values was followed for most of the testing.

Prob value is defined as the largest significance level at which a null hypotheses is acceptable (Levin, 1987: 422). The difference between using significance level and prob value in hypothesis testing is that the former involves specifying, before taking the sample, how unlikely the observed results will have to be (for example 5%), in order to reject the null hypothesis (H_o). In other words H_o is rejected if the computed statistic, $\bar{x}$, is so far from the population value μH_o that the probability of seeing a value of $\bar{x}$ this far (or further) from μH_o is less than the

significance level e.g. 5%. It is concerned with finding whether the probability of the observed value is less than the significance level, α. Prob value attempts to find the probability of getting a value of the observed value $\bar{X}$, this far or further from μH_0. Instead of finding whether the probability of the observed value is less than the significance level, α, prob value concentrates on how unlikely the observed result is.

The first reason why prob value is sometimes preferred is that it enables the researcher not to commit himself to a particular significance level for rejecting the null hypothesis before collecting the data. But he is free to compute the probability, weigh the relevant factors and then decide whether or not to accept or reject the null hypothesis.

The second reason that was found more persuasive in adopting this approach was that prob value provides the exact standard errors of the observed value instead of only knowing the minimum standard deviations (for example x would be exactly 1.96 or 2.58 standard deviation). Prob value approach converts standard error to Z value (standardized score). Then a Z-table is used to find the probability value corresponding to the Z-score by looking in the body of the table. For a two tailed testing (explained below), the tabled value is multiplied by 2 to obtain the prob value since the table values are based on one tailed testing. The standard error is calculated using equation 5A2.1, the Z-value is computed using equation 5A2.2. Figure 5A2.5 illustrates the prob value if computed Z-value is 2.5, showing the probability that Z is greater than 2.5. In any case, the SPSS^X programme that was used calculates results using the prob value approach.

Equation 5A2.1 calculation of standard error

$$s_{\bar{x}} = \frac{\hat{S}}{\sqrt{n}} \times \sqrt{\frac{N - n}{N - 1}}$$

Where:

$s_{\bar{x}}$ = Standard error of the mean

S = population standard deviation (estimate)
n = sample size

Equation 5A2.2 calculation of Z-value

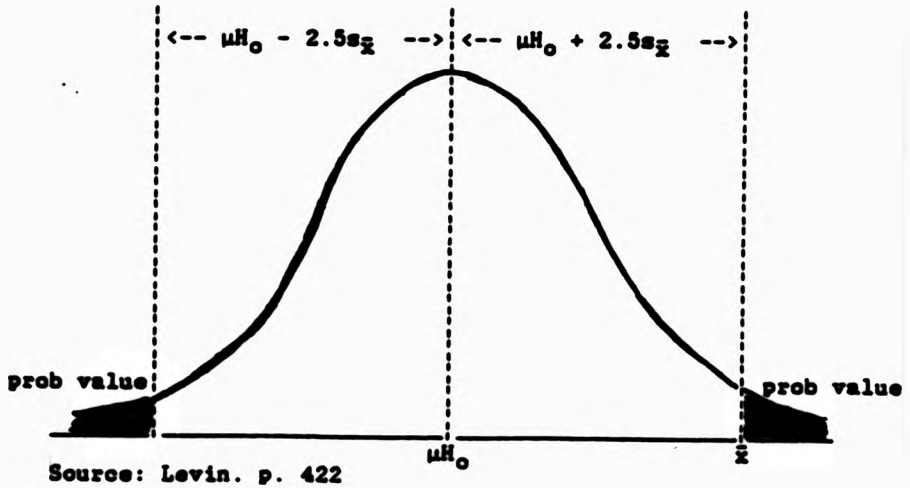
$$Z = \frac{\bar{x} - \mu.}{s_{\bar{x}}}$$

Where:

Z = standardized z-value
μ = population hypothesized value

$\bar{x}$ = sample mean
$s_{\bar{x}}$ = standard error of the mean

Fig. 5A2.5 Two-tailed hypothesis testing showing prob value



Source: Levin. p. 422

Hypothesis testing with or without prob values can be one tailed or two tailed. A two tailed test takes place when the researcher has no idea about whether the sample statistic would be lower or higher than the true population value. The illustrations given in the figures up to this point have been of this type. One tailed testing happens when the researcher has some prior hunch and his alternative hypothesis can, for example, be stated that the expected outcome would be higher (right tailed) than the population value. As an illustration of the right tailed, the alternative hypothesis in a case given earlier, in this study, was that the mean minimum salary of a leader was higher than the stipulated government's value. If a researcher's alternative hypothesis states that the statistic will be lower than the true population value, this would be a left tailed. Hypothesis testing in this research used two tailed and right tailed for various statistical techniques introduced earlier in this appendix. These will soon be picked up for detailed discussion. But before doing so, an explanation of the significance of a correlation coefficient, which was used in determining the existence of relationships between variables is now given.

5A2.3.1.4 THE SIGNIFICANCE OF A CORRELATION COEFFICIENT

In describing whether a relationship existed or whether variables were different, the study was also concerned with finding the strength and direction of the relationship between the values of two variables, where applicable. This is referred to as correlation. Regression analysis determines the nature of the relationship (Rowntree, 1981:156).

5A2.3.1.4.1 **DEFINITIONS OF COEFFICIENT OF CORRELATION AND COEFFICIENT OF DETERMINATION**

Ordinary correlation (as opposed to covariance when dealing with multiple variables) measures the degree of association between two variables. When dealing with a sample as in the case of this study, the appropriate measure was the sample coefficient of correlation *r* (see equation 5A2.8). It is the square root of the sample coefficient of determination as shown in equation 5A2.7 (Levin, 1987:542-3):

Equation 5A2.6 coefficient of correlation

$$\text{Sample coefficient of correlation} = r = \sqrt{r^2}$$

Equation 5A2.7 coefficient of determination

$$\text{Sample coefficient of determination} = r^2 = 1 - \frac{\Sigma(x_{ij} - \hat{x}_j)^2}{\Sigma(x_{ij} - \bar{x}_i)^2}$$

Equation 5A2.8 Short version of Sample coefficient of Determination

$$\text{Sample Coefficient of determination} = r^2 = \frac{a\Sigma x_{ij} + b\Sigma x_{ik}\, x_{ij} - n\bar{x}_j^2}{\Sigma x^2_{ij} - n\bar{x}_j^2}$$

where:

r^2 = sample coefficient of determination

$\hat{x}$ = Regression line of x
a = x_{ij} - intercept
b = slope of the best-fitting estimating line
n = number of data points
x_{ik} = values of the dependent or first variable.
x_{ij} = values of the dependent or first variable

$\bar{x}_{ij}$ = mean of the observed values of the dependent or first variable

The sign r indicates the direction of the relationship between two variables x_{ij} and x_{ik}. If an inverse relationship exists, that is, if x_{ij} decreases as x_{ik} increases, then r will fall between 0 and -1. Similarly if there is a direct relationship (X_{ij} increases as x_{ik} increases), then r will be a value within the range of 0 to 1. Although r indicates the direction of the relationship between two variables, it is easier to interpret r^2 than r. The sample coefficient of determination, r^2, is the primary way that measures the extent, or strength, of association that exists between two variables, x_{ij} and x_{ik}. Reference to equation 5A2.4 provides a different explanation of the sample coefficient of determination. It shows that it is nothing more than one minus the ratio between the first and the second variations which are:

variation of the x_{ij} values around the regression line = $\Sigma(x_{ij} - \hat{x}_j)^2$

and variation of the x_{ij} values around their own mean = $\Sigma(x_{ij} - \bar{x}_j)^2$

The first variation indicates the portion of the total variation that remains unexplained by the regression line. The second variation shows the total variation between each of the observed values of x_{ij} from their mean $\bar{x}_j$. Therefore in order to know or express the proportion or the fraction of the total variation that remains unexplained, this simply requires dividing the unexplained variation, $\Sigma(x_{ij} - \hat{x}_j)^2$,
by the total variation, $\Sigma(x_{ij} - \bar{x}_j)^2$, as follows:

$$\frac{\Sigma(x_{ij} - \hat{x}_j)^2}{\Sigma(x_{ij} - \bar{x}_j)^2}$$ <--- fraction of the total variation that is unexplained

When the unexplained fraction is subtracted from one as in equation 5A2.4, the result is the fraction of the total variation in x_{ij} that is explained by the regression line. It is then in this sense that r^2 measures how well x_k explains x_j, that is the degree of association between x_k and x_j.

Therefore in interpreting the sample coefficient of correlation, it is meaningless if interpreted directly, unless it is squared to obtain the sample coefficient of determination. This would provide the percentage of variation in one variable, for example x_{ij} that is explained by the regression line.

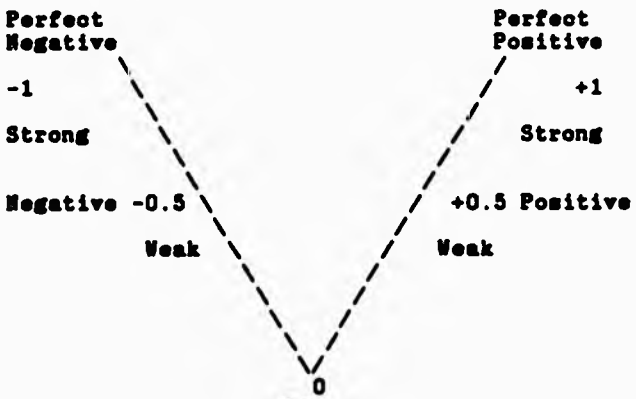
The same logical explanation can be extended to multivariate analysis where several variables are involved. This is referred to as covariance. For a further discussion of covariance, refer to appendix 5A3.2.3

5A2.3.1.4.2 THREE KINDS OF CORRELATIONS

In this section, it suffices to note that there are three kinds of correlations, namely positive, negative, and zero correlation. Positive correlation exists when changes in one variable are accompanied by changes in the other variable and in the *same* direction. This means, the larger values in one variable tend to move with values in the other variables. Negative correlation takes place when two variables change in opposite directions. That is *larger* values in one variable tend to go with *smaller* values in the other. Where there is no clear tendency for the values in one variable to move in a particular direction with the other, the relationship is said to approach a zero correlation (Rowntree, 1981:160).

5A2.3.1.4.3 **STRENGTHS OF A CORRELATION**

Correlations vary not only in direction, positive or negative, but also in strength. The strength of a correlation refers to the degree of closeness of points of values to a straight line. The closer they are, the stronger the degree of relationship. The more scattered the points move away from a line (some on either side of it), the weaker the relationship. A perfect relationship exists when all the points on a scatter diagram lie on a straight line. A scatter diagram is a dot-diagram illustrating a relationship between two variables x and y (Rowntree, 1981:159-160). In statistical inquiry, it is unlikely to obtain perfect relationship, particularly in social sciences. In this field, researchers normally deal with weaker relationships, where the points are scattered away from a straight line. The numerical measure or index used is called a *correlation coefficient*, represented by the symbol *r*. It is a maximum of +1 (for perfect positive) and -1 (for perfect negative) when the relationship is strong. It reduces to a minimum of 0 as the correlation weakens as shown in figure 5A2.6.



Source: Rowntree,p.163

5A2.3.1.4.4. DIFFERENT KINDS OF CORRELATION

There are several different kinds of correlation coefficients. The most common one is product-moment correlation coefficient, also referred to as Pearson correlation (Rowntree, 1981:163). This study dealt with this correlation in item analysis of Likert scale and in factor analysis where data was treated as interval. In addition, Phi, Cramer's B and Yule's Q were used for nonparametric statistical analysis when dealing with contingency tables. (see section 5A2.4.5. for further discussion with respect to contingency tables).

5A2.3.1.4.5 THE SIGNIFICANCE OF A CORRELATION COEFFICIENT

The correlation coefficient is therefore a statistic like any other, such as an average or dispersion. It helps to describe the strength and direction of the relationship in a sample, in this case a sample of paired values from two different variables (Rowntree, 1981:164). It measures the closeness with which the pairs of values fit a straight line.

Thus, the significance of a correlation coefficient can also be determined. It is helpful in inferring from the results of a sample to a population as a whole. The significance of a correlation depends on two factors. The first is the size of the coefficient. The bigger it is, the less likely it is to have occurred by chance. The second is the size of the sample. The more pairs of values there are in a sample, the more likely it is to see a similar correlation in other possible samples. These two factors are the basis for determining the standard error of the correlation of coefficient. It is estimated by "squaring the

correlation coefficient, subtracting it from one, and then dividing it by the square root of the number of pairs in the sample as (Rowntree, 1981:166):

Equation 5A2.6 Standard Error of the Correlation Coefficient

$$\text{Standard error of the correlation coefficient} = \frac{1 - (r^2)}{\sqrt{n}}$$

Where:

r^2 = Correlation Coefficient squared or coefficient of determination
n = sample size

The dependency on the two factors can be seen in that the bigger the correlation coefficient, the smaller the size of the standard error. Similarly, the larger the sample, the smaller the standard error.

There is no universal rule as to what counts as a weak or strong correlation as it may depend on the size of the sample and the purposes of the results. But some writers' labels, which Rowntree (1981:169-70) quoted although he does not encourage their use, but were nevertheless endorsed for use in this study as a guideline were:

0.0	to	0.2	<----	very weak, negligible
0.2	to	0.4	<----	weak, low
0.4	to	0.7	<----	moderate
0.7	to	0.9	<----	strong, high, marked
0.9	to	1.0	<----	very strong, very high

5A2.4 CHI-SQUARE TEST-X^2

5A2.4.1 INTRODUCTION

Chi-square test was selected for testing whether more than two population proportions could be considered equal since it was the appropriate one for categorical data (Levin, 1987: 442). It was therefore used to compare common variables on government policy, and awareness and knowledge of SEP and SIDO in student, graduates and businessmen questionnaires to determine whether there ware any significant differences. Further, the chi-square was also found suitable for determining if two attributes were "independent of each other" (Levin, 1987: 442) since it is said to be a "...popular way to work with two variables both of which are categorical" within one sample (Erickson, 1979: 247). It is also suitable for "attributes that have more than two categories. It is in fact one of the most widely used tests in social statistics" (Rowntree, 1981: 150).

The required performance data for the small business questionnaire were dependent performance measures of small business success. Specifically these were both economic and sociological/psychological measures. The main economic measures were two. The first group comprised financial: a) average investment cost per job b) average fixed assets per job, c) average profit per employee. Since these were not categorical data, the suitable statistical technique was differences between means, presented in section 5A2.6. The second economic main measure was non-financial, especially a) proportion of new firm formations. The sociological/psychological measures were attitudes towards governments' policy of supporting small firms.

Chi-square was determined to be the suitable statistical technique for analysing dependent variables relating to small business performance measures concerning the proportion of new firm formations and the sociological/psychological measures mentioned above. Independent variables dealt with family and personal characteristics and their relationship to firm formation and performance. Some of these were parental background (education, career, experience). Others were owner variables (such as education). Still others included past and present job experiences. Still more other variables analysed were how start up capital was raised, for example whether it was through own savings or borrowing etc., or whether the firm was inherited. Variables relating to operations concentrated on differences between small and large firms. They sought to find out whether or not they had obtained a bank loan or any financial assistance from SIDO etc. Promotional and lending policies of agencies were analysed both through chi-square analysis and content analysis. The later is briefly introduced in section 5A2.10.

Attitudes of potential and practising businessmen is the subject of section 5A2.9 of this appendix, which dealt with Likert scale. But as will be explained later, chi-square analysis was also applied to attitude items to find which items were highly endorsed. Explanations of how job creation was measured is the subject of section 5A2.8 of this appendix.

It is not possible to discuss all the variables generated for student, graduate and businessmen questionnaires due to lack of space. These were many - about 150, 200 and 300 for students graduates and businessmen respectively. Therefore in the ensuing discussion, only some of them will be highlighted in order to

show the principles involved. Detailed presentation was done in chapters 6 to 10 which dealt with analysis of research results.

It is easier to explain how the chi-square technique was used by referring to an example. One of the fascinating issues in studying the student career expectations was to find out at what point students decided on the type of degree to major in during their study period. The school expects them to make their preferences at the end of their second year. The final category of placement is based on student's choice and his performance over the previous two years for the accounting degree. One of the interesting aspects was that there has been more graduates in the field of accounting than business administration, a ratio of about 4:1, since the first graduates of 1981.

The analysis required was to find out whether degree preference depended on the year of study. That is whether there were any differences in preferring a particular degree among the first years, second years and third years. Such information could be of use to student career advisors. This problem was analysed and the hypothesis tested using chi-square. The objective in using chi-square was to calculate a X^2 statistic by finding differences between observed frequencies and the expected frequencies, standardizing the results and then summing the standardized values. The calculated statistic was then compared to a family of chi-square probability distribution. The smaller the difference between the two, the higher was the likelihood that the observed frequencies were by chance and that the two were not different but equal. The bigger the difference, the greater was the likelihood of rejecting the null hypothesis of no difference and accepting that there was indeed a difference.

5A2.4.2 CONTIGENCY TABLE

Chi-square analysis is based on crosstabulation or crossclassifications or simply on what is referred to as contigency table. The table is made up of rows running horizontally and columns running vertically. The dimensions of such a table are described by rows and columns (excluding the total rows and column). Given a sample of responses to two variables, the aim is to examine the tables for possible relationships between the row and the column variables (Erickson, 1979: 249). Since there is no difference in terms of constructing contigency tables for one sample or more than two samples as a pooled proportion is used, the subsequent discussion will apply to both situations.

It is easier to explain the process of using contigency table by referring to tables 5A2.1 and 5A2.2. The starting point for the example given above was to make tallies or find frequencies for respondents falling in any cell (see table 5A2.1). This was formed by the combination of a category from one variable, the row variable with another category of the second variable, the column variable (like sorting letters into pigeon holes). The number of respondents belonging to a cell or pigeon hole in table 5A2.1 is referred to as a *cell entry*. Each *marginal* is the total of number of people falling in one category of one of the variables, either the row or column total. The sum of either the row marginals or the column marginals make up the total respondents on the two variables in the table. The labelling of a cell, marginals and total respondents is shown in table 5A2.2.

Table 5A2.1 Contigency table of student's preferred degree By year of study.

Year of study in 1985/86

Type of preferred degree		1ST YEAR	2ND YEAR	3RD YEAR	
	BUSINESS ADMIN	15	16	17	48
	ACCOUNTANCY	41	41	51	133
		56	57	68	181

Table 5A2.2 Names of the Parts of Table 5A2.1

Column variable

Row Variable		1ST YEAR	2ND YEAR	3RD YEAR	
	BUSINESS ADMIN	cell entry	cell entry	cell entry	row marginal
	ACCOUNT-NCY	cell entry	cell entry	cell entry	row marginal
		Column marginal	column marginal	column marginal	Total n

5A2.4.3 OBSERVED AND EXPECTED FREQUENCIES

The first step was to calculate the expected frequencies. But first the two hypotheses were stated based upon the true proportions of the student population from where the sample was taken as:

P1 <---- proportion of first year students who preferred business administration degree.

P2 <---- proportion of second year students who preferred business administration degree.

P3 <---- proportion of third year students who preferred business administration degree.

The null and alternative hypotheses were then stated as :

H_0: $P_1 = P_2 = P_3$ <-- null hypothesis of no difference

H_1: P_1, P_2 and P_3 are not all equal <-- alternative hypothesis

---

5A2.4.3.1 CONTINGENCY TABLES WITH TWO ROWS

For a simple 2 x n table (such as the 2 x 3 above), if the null hypothesis that the three proportions of first, second and third years are equal, this data can be combined and then the proportion of the total students of the entire population who preferred Business Administration degree estimated as follows:

Equation 5A2.7 calculation of combined proportions

combined proportion of students who preferred Business Administration degree assuming the null hypothesis of no difference is true.

$$= P = \frac{P_1 + P_2 + P_3}{n}$$

$$= \frac{15 + 16 + 17}{161} = \frac{48}{161}$$

$$= .26$$

By converse, the proportion of students who preferred the accounting degree must be .74 (1 - .26 = .74).

It should be noted that the combined proportion for the row variable is simply the row total divided by the sample total. The combined proportion of .26 can be used as an *estimate* of the population proportion of students who chose B.A degree and .74 is also the estimate of the population proportion who preferred BAc degree. The number of students, from the sampled students, who would be expected to prefer B.A. degree can now be estimated by multiplying the population proportion estimate by the number of observations of year of study as shown in table 5A2.3.

Table 5A2.3 Proportion of sampled students in first, second third year of study expected to have chosen B.A. degree B.A degree or BAc degree.

	1ST YEAR	2ND YEAR	3RD YEAR
Total number sampled	56.	57.	68.
Estimated proportion of students who selected B.A degree	X .265	X .265	X .265
Number expected to choose B.A degree (Expected theoretical frequency = fe)	14.84	15.11	18.02
Total number sampled	56	57	68
Estimated proportion of students who selected BAc degree	X .735	X .735	X .735
Number expected to choose B.Ac degree (Expected theoretical frequency = fe)	41.16	42.00	49.98

When table 5A2.1 is compared with table 5A2.3, this for example means that the observed frequency (for the first row and first column) was 15 but the expected was 14.84 or to the nearest 15 students, and so on.

5A2.4.3.2 CONTINGENCY TABLES WITH MORE THAN TWO ROWS

The calculation of expected frequencies for any table can be found by using a generalized formula based on the binomial distribution. The marginal probability of a cell is the joint probability of the row and column totals under the assumptions of independence. The hypotheses seen above may then be restated as:

H_0: Preferred type of degree and year of study are independent.

H_1: Preferred type of degree dependents on the year of study i.e. lower forms are likely to be indecisive.

α = .01 <- level of significance for testing these hypotheses.

If preferred type of degree and year of study are really independent, then formula 5A2.5 can be used to estimate the proportions in each cell (Levin, 1987: 451 and 165). As an example, the probability of cell one (formed by the row variable, preferred type of degree, (business administration) and the column variable (year of study - 1st year) is.

Equation 5A2.6 Joint probability.

$$p(C) = p(A \text{ and } B) = p(A) \times p(B)$$

$$= \frac{(48)}{(181)} \times \frac{(56)}{(181)}$$

$$= .265 \times .309 = .082$$

Where:

p(C) = marginal probability of selecting Business Administration (B.A) and being a first year i.e.the expected proportion.

p(A) = marginal probability of event A occurring (selecting B.A degree).

p(B) = marginal probability of event B occurring (being a first year).

p(A and B) = Joint probability of events A and B (selecting B.A degree and being a first year).

The calculated proportion is then multiplied by the total number of respondents (n) to get the expected *frequency* which is:

$$p(n) = .082 \ (181) = 14.84$$

which is the same result as found in table 5A2.3 above. The same process is continued for the remaining cells until all the expected frequencies have been calculated. It will be recalled

that the probability of *A* was simply the proportion of the row total over the sample total (for a particular cell) and the probability of *B* was the proportion of the column total to the sample total. This means that in general (Nosanchuk, 1979: 251):

> If the row and the column variables are not related, then the proportions inside the table will be the same as those in the marginals: but if the variables are related, then the proportions vary from row to row and column to column."

Therefore, in general, the short formula for calculating the expected frequency utilises the row and column proportions as (Levin, 1987: 451):

Equation 5A2.9 Chi-square Expected Frequency

$$fe = \frac{RT}{n} \times \frac{CT}{n}$$

$$= \frac{RT \times CT}{n}$$

where:

fe = the expected frequency in a given cell

RT = the row total for the row containing that cell

CT =the column total for the column containing that cell

n = the total number of observations (sample).

Using equation 5A2.9, the expected frequencies for each would be exactly the same as those in table 5A2.3. These are shown in table 5A2.4, second row of each cell, where all the information up to this point is drawn together by comparing the expected to the observed.

Table 5A2.4 Comparison of observed and expected frequencies of sampled students.

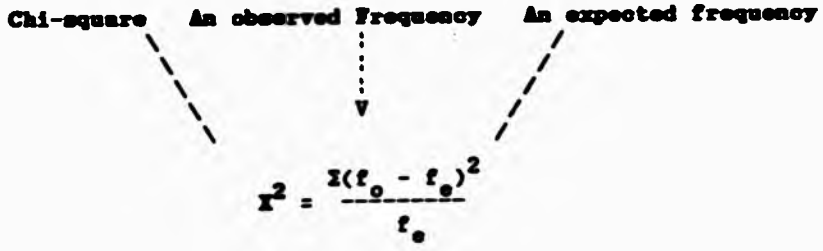
		Year of study in 1985/86		
		1ST YEAR	2ND YEAR	3RD YEAR
TYPE OF PREFERRED DEGREE	FREQUENCY PREFERRING BUSINESS ADMIN:			
	observed (actual frequency)	15	16	17
	Expected (theoretical frequency)	14.84	15.11	18.02
	FREQUENCY PREFERRING ACCOUNTANCY:			
	observed (actual frequency)	41	41	51
	Expected (theoretical	41.16	42.00	49.98

As stated earlier, if the sets of observed and expected frequencies are nearly alike, the hypothesis of no acceptance is accepted. If the difference is too large the null hypothesis is rejected. Intuitively the results above tend to show that the frequencies of each set are similar. The chi-square statistical analysis technique however requires the calculation of the difference of each set and then determine whether such a difference is statistically significant.

5A2.4.4 CALCULATING THE CHI-SQUARE STATISTIC

The second step after obtaining the frequencies was therefore to calculate the X^2 statistic. This is the sum of the differences between the observed and the expected, squared and then divided by the expected as (Levin, 1987: 446):

Equation 5A2.10 calculation of chi-square



It is easy to do the numerical calculations by hand using a table such as table 5A2.5, which shows the sub-steps.

Table 5A2.5 Calculation of X^2 (chi-square) statistic from data shown in table 5A2.4

		step1	step 2	step 3
f_o	f_o	$f_o - f_e$	$(f_o - f_e)^2$	$\frac{(f_o - f_e)^2}{f_e}$
15	14.84	0.16	0.03	0.00
16	15.11	0.89	0.79	0.05
17	16.02	-1.02	1.04	0.06
41	41.16	-0.16	0.03	0.00
41	42.00	-1.00	1.00	0.02
51	49.98	1.02	1.04	0.02
				0.15

step 4 --> $\frac{\Sigma(f_o - f_e)^2}{f_e} = 0.15$ --> X^2 (chi-square)

The intuitive explanation of the chi-square statistic calculated above was that the observed frequencies almost matched the expected frequencies since the statistic was very close to zero. But the last step of chi-square hypothesis testing required formal testing instead of a hunch. This simply called for comparing the calculation of the calculated chi-square with the theoretical (tabled) population chi-square distribution at a particular confidence level in order to find out whether the two were the same as intuitively seen or whether they were different. To be the same, i.e. of no large statistical significance or difference, the calculated chi-square had to fall within the acceptance region. In such a case, the null hypothesis would then be accepted. The alternative was that they were different. The null hypothesis would then be rejected.

5A2.4.5 TESTING THE CHI-SQUARE STATISTIC

A *chi-square distribution* is a probability distribution just like the normal distribution or the student t-distribution. Hence its total area under the curve is 1.0. But it has many different distributions, like the t-distribution, for different degrees of freedom. (The t-distribution is used for continuous variable where the total sample is small, i.e. less than 32). To use the tabled chi-square distribution, the number of degrees of freedom had to be calculated. The number of degrees of freedom is equal to the number of values that can be determined freely. (Levin, 1987: 448). The equation for determining the degrees of freedom for a chi-square is:

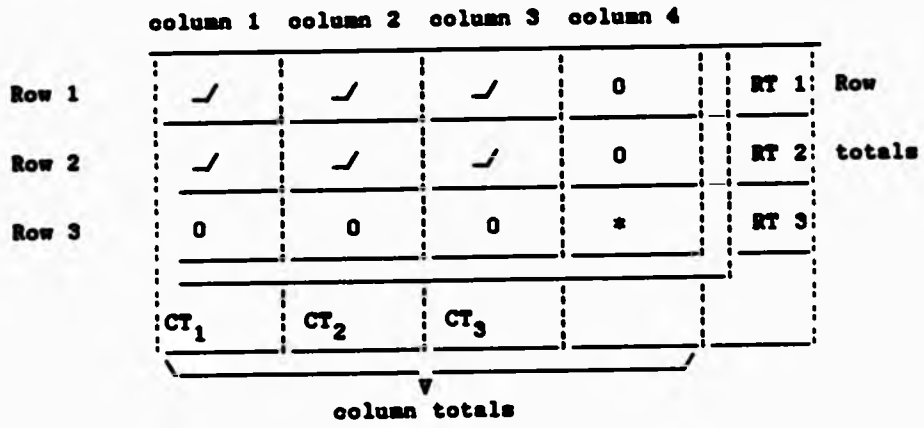
Equation 5A2.11 calculating No. of degrees of freedom for X^2

No. of degrees of freedom = (No. of rows - 1) (No. of columns - 1)

The logic and appropriateness of the formula can best be examined through an illustration as shown in table 5A2.6. Referring to the first row of the contingency table in 5A2.6, once the first three values are specified in that row (denoted by checks in the table), then the fourth value in that row (denoted by zero) is automatically determined. That is there is no freedom to specify it. This is so because the row total or marginal is known as explained in tables 5A2.1 and 5A2.2. The freedom is therefore limited to the first three. Likewise, only the first three values can be determined in the second row as the fourth is already known and cannot be freely specified. The same reasoning can be applied to the third row for the first two entries.

Finally, turning to the last entry in the third row (denoted by an asterisk) it can easily be seen that this value cannot be freely specified. This is so because the first two values in the fourth column have already been determined as above. It can therefore be seen that the number of degrees of freedom is found by merely counting the number of checks (which can freely be determined). The total is six, which is 2 X 3, or (the number of rows - 1) times (the number of columns - 1). This is the same value obtained by equation 5A2.6.

Table 5A2.8 contigency table illustrating determination of the number of degrees of freedom



Key to symbols:

✓ --> values that can freely be specified

0)
) --> values that cannot freely be specified
*)

RT = Row totals
CT = column totals

Source: Levin p.448

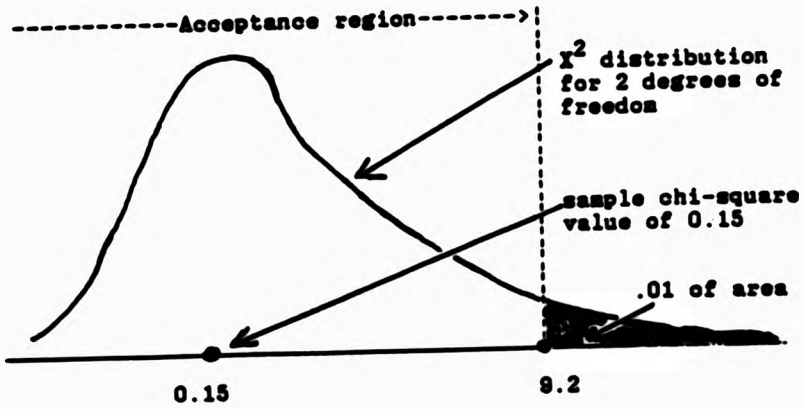
Returning to the example of selecting the type of degree by students and applying the general formula of equation 5A2.6, the number of degrees of freedom were 2 found as:

Equation 5A2.11 calculating number of degrees of freedom for X^2.

$$\begin{aligned} \text{No.of degrees of freedom} &= (\text{No. of rows} - 1)(\text{No. of columns} - 1) \\ &= (2 - 1)(3 - 1) \\ &= (1)(2) \\ &= 2 \end{aligned}$$

Referring to a chi-square table and looking under the 0.01 column for the critical value and moving down to the 2 degrees of freedom row, the value of chi-square was 9.2. Since the calculated chi-square statistic of 0.15 was lower than the chi-square distribution value of 9.2, the statistic fell within the acceptance region as shown in figure 5A2.7. This confirms the earlier intuitive explanation. The probability of the null hypothesis that the three proportions were the same was 0.93, which was very high. Hence the null hypothesis of no difference was accepted. This meant that there was no evidence to support the view that the year of study influenced the choice of the type of degree among first, second and third year students at the Copperbelt University.

FIGURE 5A2.7 Chi-square hypothesis test at the 0.01 level of significance, showing the acceptance region and the sample chi-square value of 0.15.



Source: Adapted from Levin p.450

5A2.4.6 APPLIED CORRELATION COEFFICIENTS

In order to test the strength of the relationships between variables, Phi, Cramer's V and Yule's Q were used for the contigency tables. Phi (see equation 5A2.12) is used to determine the strength of a relationship computed using chi-square for tables which are either 2 X 2, R X 2 or 2 X C going from 0 to 1 for no relationship to a perfect relationship (Erickson, 1979: 260-261). The "R" and "C" stand for rows and column.

Equation 5A2.12 calculation of phi coefficient

$$\phi^2 = \frac{X^2}{n}$$

where

ϕ^2 = phi-squared
X^2 = chi-square statistic
n = sample size

In cases where the size of a table was greater than 2 rows and 2 columns, Cramer's V, which is a modified version of ϕ^2 ,which also goes from 0 to 1 was used:

Equation 5A2.13 calculation of Cramer's V coefficient

$$\text{Cramer's V} = \sqrt{\frac{X^2}{n(s-1)}}$$

where s = either R or C, which ever is smaller
n = sample size

In other situations, where the expected values were less than 5 for a 2 X 2 contigency table, Yule's Q was used to provide a correction factor. It is said to be one of the best and simple measures used in social sciences (Erickson, 1979:261). It uses a system of relabelling the counts in the cells of the 2 X 2 table of the form:

	columns	
rows	a	b
	c	d

Equation 5A2.14 calculation of Yule's coefficient

$$Q = \frac{ad - bc}{ad + bc}$$

5A2.5 DIFFERENCES BETWEEN PROPORTIONS

It was stated in the last section that the chi-square test also applied for comparing common variables relating to government policy, awareness and knowledge of SEP and SIDO among the three samples (students, graduates and businessmen). But to find the over all results about whether or not students' and graduates' responses, on their attitudes towards the adequacy of the SBIS degrees were significantly different, the most suitable statistical analysis was found to be the difference between proportions. It is used for analysing differences between two populations on categorical variables. To test whether the differences were large enough to reject the null hypothesis, a Z-test was applied at 5% significance level. The chi-square test could also have been used in this case by combining all the responses and treat them as one sample. Then the analysis could have proceeded in the usual manner of forming a contingent table first. Then find the cases that fell in each of the cells before calculating the chi-square.

Another variable where the application of the differences between proportions was found useful was the entrepreneur's educational level. The hypothesis relating to education, it will be recalled, was that becoming an entrepreneur required a basic level of at least secondary school education, contrary to government's view that grade VII dropouts would easily own businesses. To test this hypothesis it was essential to compare entrepreneurs' educational attainment to Zambia's entire population educational proportions. However the only official

data available was Zambia's man power population educational achievements. That is, the educational levels and the numbers of those who were engaged in employment. Since the data available of manpower population did not comprise Zambia's total population, it was merely regarded as a sample. It would therefore not have been appropriate to adopt hypothesis testing of proportions and treat, for example, those with at least secondary education as the hypothesized value of the population proportion of successes (PH_o) and those with primary or none as population proportion of failures (QH_o). Hence it was found correct to treat it as a second sample and use the difference of proportions approach.

The objective in testing the hypothesis was therefore to find out whether there was a significant difference between the proportions of educational achievements of entrepreneurs and Zambia's employed population, regarded as a sample. In addition, entrepreneurs' educational achievements were compared to chief executives' educational levels within the same sample of businessmen, using chi-square analysis. In other words chief executives who were non business owners, but were employees in the responding organisations were used as a control group, regarded as an independent sample.

This assumption is acceptable since first entrepreneurs' sub sample was basically different from other businessmen. Second, the businessmen questionnaire was administered in three different towns using separate sampling frames and following a systematic proportional random sampling procedures as explained in chapter 5.

Since the analysis was dealing with proportions because the data was discrete and not continuous, the binomial was the correct distribution to use . But since the sample size was large (np and nq each need to be at least 5), the normal distribution was used in testing the hypothesis as a substitute for the binomial (Levin, 1987: 339,388). In order to use the normal curve proportions, the mean and the standard deviation of the binomial distribution had to be approximated to the mean and standard deviation of a sampling distribution of the proportion as (Levin, 1987: 338-339).

Equation 5A2.15 Mean of the binomial distribution

$$\mu = np$$

$$S = \sqrt{npq}$$

where

n = number of trials
p = probability of a success
q = probability of a failure found by taking 1 - p

Equation 5A2.15 shows that the mean of the binomial distribution is equal to the product of the number of trials, n, and the probability of successes, p. That is *np* equals the mean number of successes. To derive the mean of the *sampling distribution of*

the proportion of successes, the *number* of successes is changed to the *proportion* of successes by dividing *np* by *n* and obtain *p* only as:

Equation 5A2.17 The mean of the sampling distribution of the proportion of successes

$$\mu_{\bar{p}} = p$$

In a similar manner the standard deviation for the proportion of successes in a sample, called the standard error of the proportion, can be determined by modifying the standard deviation of the binomial distribution, $\sqrt{npq}$ in equal 9.16. This measures the standard deviation in the number of successes. To change the number of successes to proportion of successes, the standard deviation of the binomial, $\sqrt{npq}$, is divided by *n* to to get $\sqrt{pq / n}$ symbolized as :

Equation 5A2.18 standard error of the proportion.

$$s_{\bar{p}} = \sqrt{\frac{pq}{n}}$$

Since the analysis was dealing with a sample and not a population, equation 5A2.18 was modified to equation 5A2.19, which was then finally used in computations. As sample statistics $\bar{p}$ and $\bar{q}$ are good estimators of the population parameters, they were used to estimate the standard error of the proportion (Levin, 1987: 340) as:

Equation 5A2.19 sample standard error of the proportion

$$s_{\bar{p}} = \sqrt{\frac{\bar{p}\,\bar{q}}{n}}$$

Returning to the case of analysing differences between sample proportions, a problem was first set up and the null and alternative hypotheses stated as:

p_1 = sample proportion of successes with first sample (for example entrepreneurs)

$\bar{q}_1$ = sample proportion of failures with first sample.

n_1 = sample size of entrepreneurs

$\bar{p}_2$ = sample proportion of successes with second sample (for example Zambia's labour force)

$\bar{q}_2$ = sample proportion of failures with second sample.

n_2 = sample size of Zambia's labour force.

The null and alternative hypotheses were then stated as:

$H_o : p_1 = p_2$ <-- Null hypothesis: There was no difference between the two samples samples (for example entrepreneur's and labour force labour force educational levels).

$H_1 : p_1 \neq p_2$ <--- Alternative hypothesis: There is a difference

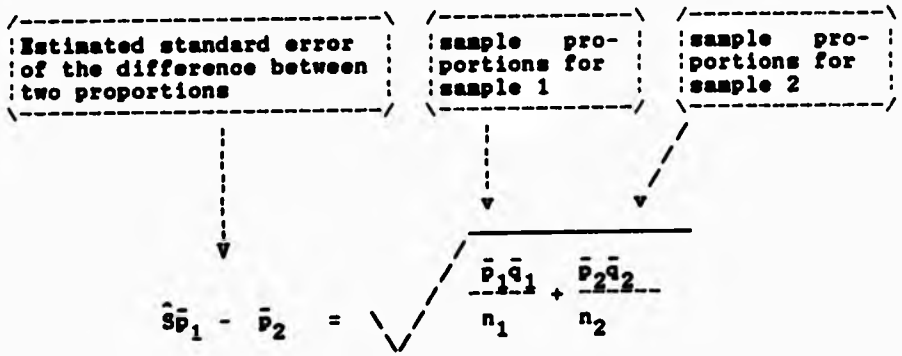
$\alpha = .05$ <---level of significance for testing this hypothesis

To find the difference between two sample proportions was a five step process requiring first calculating the standard error of the difference between two proportions. Second, determining the appropriate Z value for the proportion of the area under the curve at 0.05 significance level. Third, finding the limits of the acceptance region by multiplying the standard error of the difference between the two proportions by the Z value, for two tailed hypothesis testing. Fourth, calculating the difference between the proportions of successes between the two samples. This merely involved subtracting the percentage (or proportion) of the second sample from the percentage (or proportion) of the

first sample. Fifth, comparing the calculated difference between proportions to the calculated two limits of the acceptance region to find out whether it fell inside or outside the acceptance region. If it was contained inside then no significant difference existed and the null hypothesis was accepted since no convincing evidence existed to reject the null hypothesis. However, if it fell outside the acceptance region the null hypothesis was rejected and the alternative hypothesis that the two proportions were different was accepted.

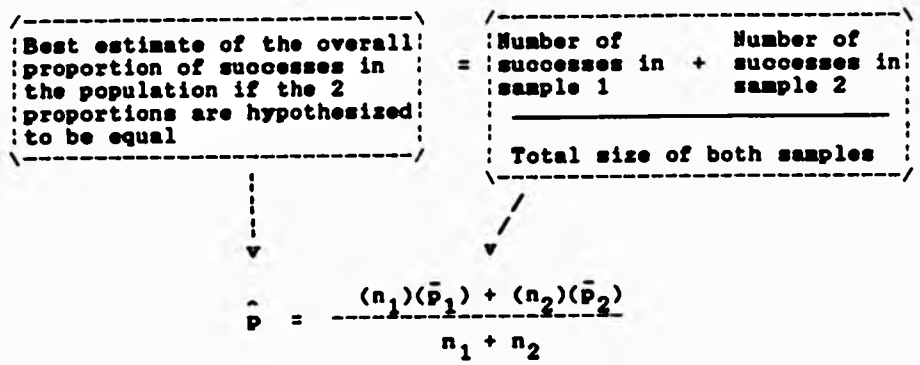
The procedure will now be taken up for explanation beginning with the application of the first step. Since the population parameters were not known, the modified equation, using sample statistic estimations, applied was (Levin, 1987: 411):

Equation 5A2.20 Estimated standard error of the difference between two proportions



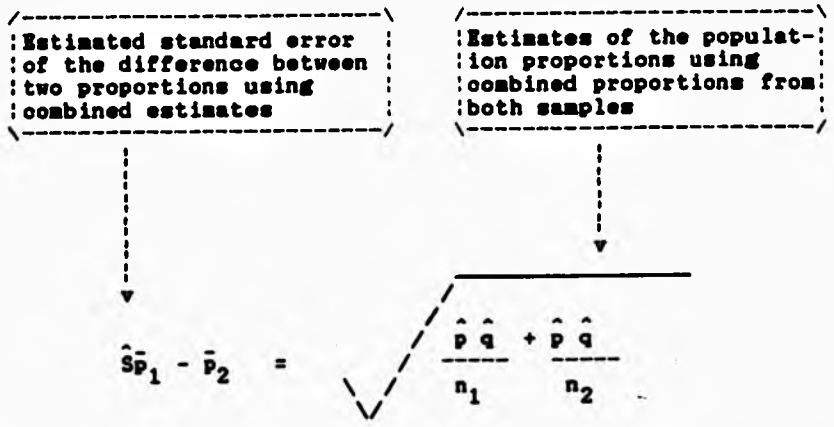
A simpler formula is the overall population of successes. It utilizes the combined proportion of successes in both samples, based upon the hypothesis that there is *no difference* between the two proportions. (Levin, 1987: 412). The combined proportion of successes is:

Equation 5A2.21 pooled best estimate of the overall proportion of success.



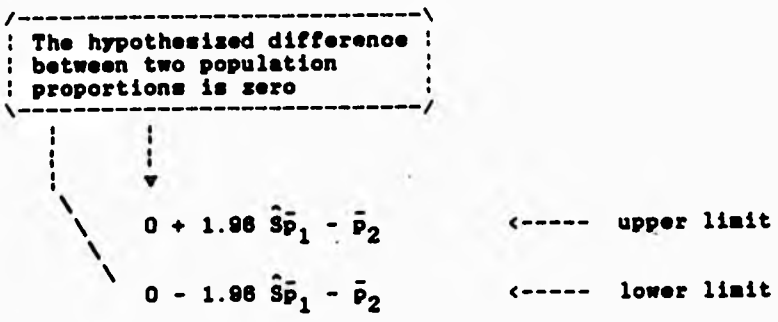
modifying equation 5A2.20 and using the p and q values gives:

Equation 5A2.22 Estimated standard Error of the difference between two proportions using combined estimates



In applying step 2, the corresponding probability at 0.05 was found to be .475 (1 - 0.05 / 2) for a two tailed test. The appropriate Z value for .475 was then determined to be 1.96 from a normal distribution table (since the samples were large). The third step called for delimiting the lower and upper bounds for the acceptance region as:

Equation 5A2.23 setting limits between two population proportions

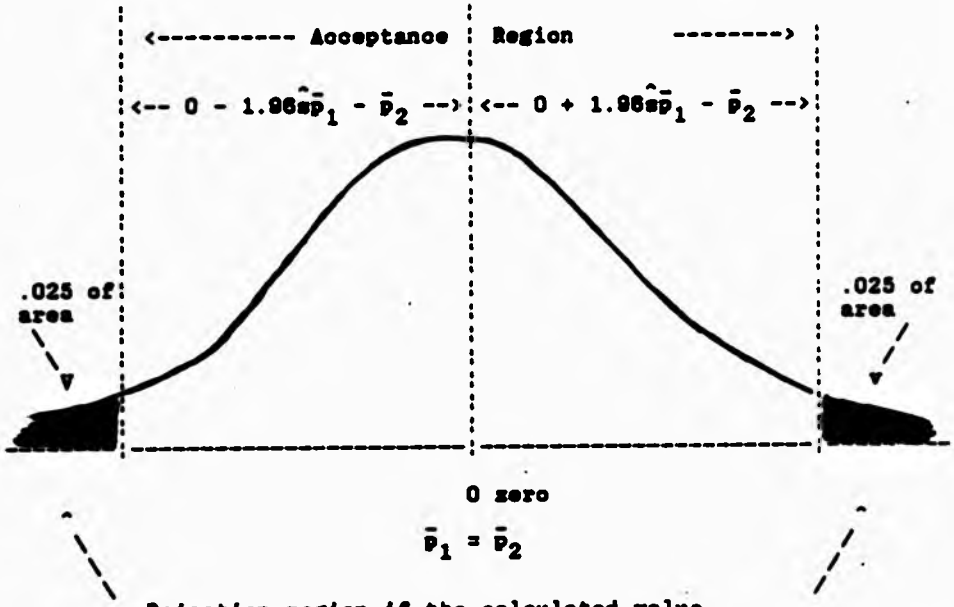


The fourth step needed finding the difference between proportions of successes between the two samples which was done as:

Difference between sample proportions = $\bar{p}_1 - \bar{p}_2$

The last step was accomplished by merely comparing the difference between the sample proportions to the limits of the acceptance region to see whether it fell inside or outside as (without calculated value of the difference of proportions):.

Figure 5A2.8 Two-tailed hypothesis of the difference between two proportions at the .05 level of significance



Source: modified from Levin, 1987:413

5A2.6 DIFFERENCES BETWEEN MEANS AND HYPOTHESIS TESTING ON THE MEAN & ESTIMATION OF THE POPULATION MEAN

The appropriate statistical analysis for finding differences between two samples for continuous variables was determined to be the differences between means. To test whether the difference was significant, *Z* test was applied. This involved variables such as the number of months students and graduates had worked in a small firm. Others on small firms related to both economic and sociological. Economic measures involved two main ones. The first group comprised financial and in particular a) gross profit b) total fixed assets per job, c) scale of operation (gross sales and size of a firm). Still more other variables analysed were the amount of capital required for start up. The aim was to investigate differences in average required investment capital, sales and gross profit between small and large firms.

Some quantity variables relating to operations concentrated on differences in bank loan acquisitions. These were the levels of amount of loans advanced by commercial banks to small compared to large firms and number of times that the two groups had been successful, among many other variables. The amount of financial assistance received from SIDO and number of times they were successful etc. were also considered. The second economic main measure was non-financial, especially a) proportion of new firm formations. Others were owner variables (such as age at the time of the study and before forming the firm). In addition, numbers of managers in a small firm were compared to a large firm.

A related test to this was hypothesis testing of the mean. After testing the hypotheses, estimation of the population mean

were carried out. One of the estimations done was in conjunction with the testing of the small firm definition (as being three managers) in the Zambian environment. This involved comparing the average number of managers per firm, found in the study, with the average number of of 3 managers found by other studies in western countries, which was taken to be the hypothesized population mean for a small firm. The aim was to find whether the mean number of managers in small firms in Zambia was the same or different from the mean number of managers from other studies. If there was no significant difference, the mean number of small firms in Zambia had to fall within the lower and upper limits around the hypothesized population mean for small firms, otherwise it was different. If there was no significant difference the null hypothesis of no difference was accepted, otherwise it was rejected.

3A2.6.1 DIFFERENCES BETWEEN MEANS

The concepts involved in the analysis of the differences between means were the same as those dealt with in the analysis of the differences between proportions. The basic concept was that when dealing with two populations, the difference between sample means has its own sampling distribution and its own mean. It also has its own standard deviation, called the standard error of the difference between two means, just as in the case of one population (Levin, 1987: 398-399). The difference between sample means is found by merely subtracting the two sample means as:

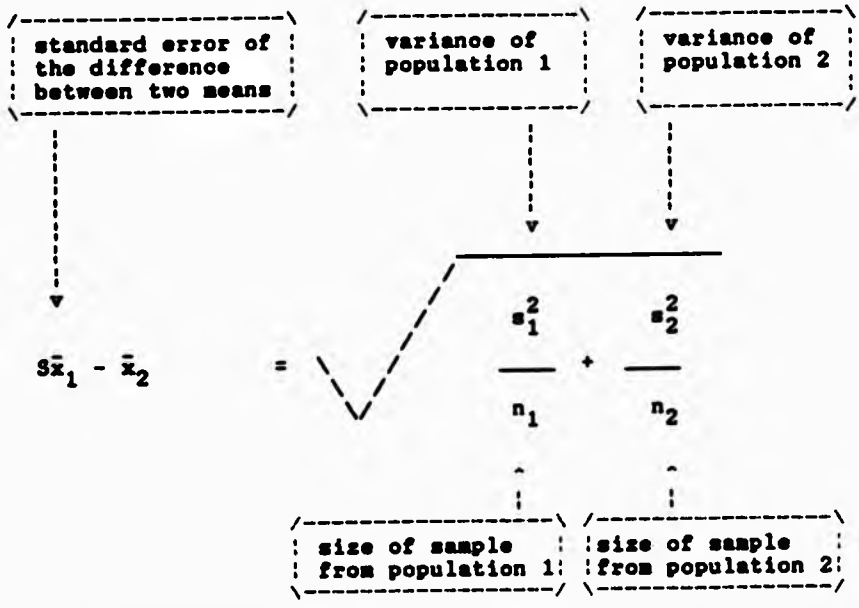
$\bar{x}_1 - \bar{x}_2$ <--- difference between sample means.

The difference will obviously be positive if $\bar{x}_1$, is larger than $\bar{x}_2$ and negative if $\bar{x}_2$ is bigger than $\bar{x}_1$. The procedure in an hypothetical situation is that all possible sample differences of

$\bar{x}_1 - \bar{x}_2$ are used to construct a sampling distribution of the difference between sample means. This sampling distribution has the same parameters as in a one population situation. The *mean of the sampling distribution of the difference between sample means*, which is symbolized as $\mu\bar{x}_1 - \bar{x}_2$ and is equal to $\mu\bar{x}_1 - \mu\bar{x}_2$. This is the same as $\mu_1 - \mu_2$. If $\mu_1 = \mu_2$, then $\mu x_1 - \mu x_2 = 0$. Thus the mean of the sampling distribution of the difference between sample means is equal to zero if the hypothesized difference between means is equal i.e. no difference.

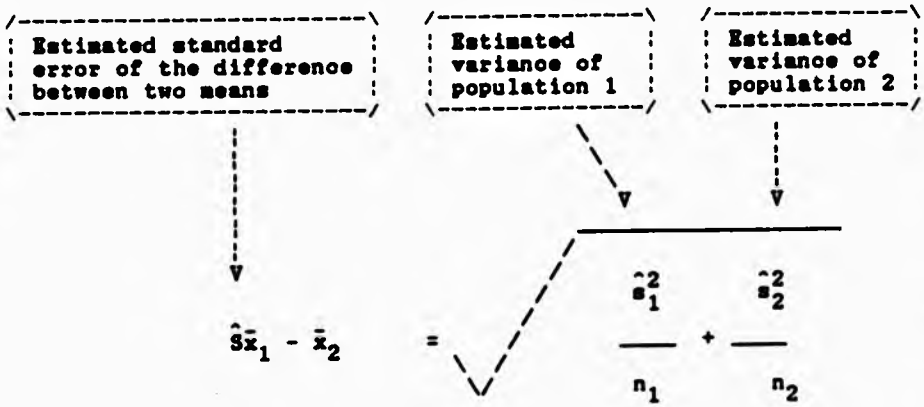
The formula for finding the standard deviation, or in statistical terms better called the standard error of the difference between two means, which is similar to the one used for the difference between proportions, was (Levin, 1987: 399):

Equation 5A2.24 standard Error of the difference between two means



But since the two population standard deviations were not known, an estimate of the standard error of the difference between two means was made using the sample standard deviation to estimate population standard deviation. The formula above became:

Equation 5A2.25 Estimated standard error of the difference between two means



where

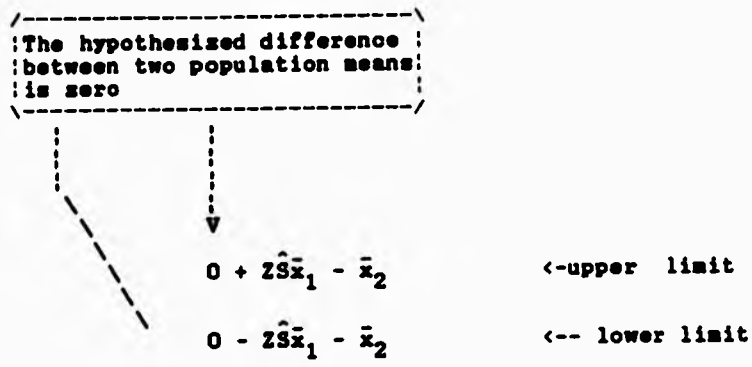
$\hat{s}$ = s <----sample standard deviation

$$= s = \sqrt{\frac{(x - \bar{x})^2}{n - 1}}$$

The five steps discussed in the previous section when dealing with proportions, were also applicable when finding the difference between two means. Therefore after calculating the standard error of the mean as above, the second stage was finding the appropriate *Z* values at a particular significance level.

Third, the lower and upper acceptance limits were determined, in general, as:

Equation 5A2.26 Setting upper and lower boundaries of two population means.



The fourth stage it will be recalled was calculating the difference, in this case, between the sample means by subtracting the mean of sample 2 from the mean of sample 1. The last stage simply called for comparing the calculated difference to the limits of the acceptance region to see whether or not it was included in the region. If it was, as usual, the null hypothesis was accepted that there was no difference between the observed and sample means. This implied that the observed difference was merely sampling error. If a large difference existed, (for example in the required mean capital between small and large firms) the calculated value of the difference between two sample means fell in the critical region, in which case, the null hypothesis was rejected for lack of evidence. The alternative hypothesis that a real difference indeed existed was then accepted.

5A2.6.2 HYPOTHESIS TESTING OF THE MEAN AND ESTIMATING THE POPULATION MEAN

Some variables required making inferences about the population parameter, the mean. Therefore this called for estimating the population mean parameter. For example, in the case of testing whether research findings elsewhere of the average number of managers being 3 in a small firm was applicable to the small manufacturing firms in Zambia, the method of finding differences between two means was not directly befitting. The reason was that the sample standard deviation and the sample size were missing from reported research evidence elsewhere. The only information prominently available was the sample mean of three managers. Another variable where only the population mean was available was the mean minimum salary of a leader of K2,500. This was the cut off point to qualify to the leadership position as legally determined by the Zambian government.

The appropriate methods of analysis in both situations were therefore determined to be hypothesis testing. This was then followed by estimation of the population mean in order to determine the confidence limits within which the true population value should fall (number of managers in a small firm or salary of a leader) with reasonable accuracy in the Zambian environment.

5A2.6.2.1. HYPOTHESIS TESTING OF THE MEAN

Hypothesis testing approach required the sample data and in particular the sample statistic called the mean and the hypothesized population mean (of 3 managers or K2,500 salary of a leader). Then a comparison was made of the sample mean, the statistic, actually found from the study in order to determine whether or not there was a significant difference between the statistic and the hypothesized population parameter. That is whether the probability value was large or small. The basic assumption in making the estimates was that the reported mean value of 3 managers from research evidence elsewhere or the salary of a leader, legally instituted, was the correct hypothesized value of the population parameter.

Hypothesis testing which was introduced earlier in this appendix, it will be recalled, involved stating the hypotheses and the problem, for example, as:

H_o: $\mu = \mu H_o$ <-- null hypothesis: The mean of the population was equal to the hypothesized value.

H_1: $\mu \neq . \mu H_o$ <-- alternative hypothesis. The mean of the population was not equal to hypothesized population value.

The problem setting was

μH_o = Hypothesized value of the population mean for example, mean number of managers of 3 per small firm or salary of a leader being 2,500

n = sample size

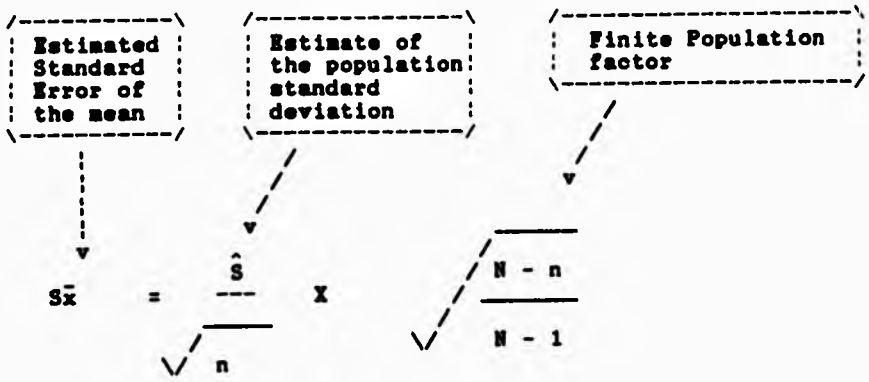
$\bar{x}$ = sample mean

s = sample standard deviation

Four of the five steps described when dealing with differences between means were applicable, with two modifications. Instead of calculating the estimated standard error of the difference between two means, only the estimated standard error of the mean of one sample was calculated (since sample standard deviation and sample size were available for one sample only). The second modification of the formula was that in delimiting the acceptance boundaries the population mean as opposed to the difference between two sample means was considered. Hence in the first stage, the ordinary estimated

standard error of the mean (using sample estimates since the population standard deviation was not known) was applied as (Levin, 1987:336):

Equation 5A2.27 Calculation of estimated standard error of the mean when the population standard deviation is unknown



where

$s_{\bar{x}}$ = Estimated standard error of the mean

$\hat{S} = s = \sqrt{\frac{\sum_{i=1}^{n=1}(x_i - \bar{x})^2}{n-1}}$ = estimate of the population standard deviation

where in turn

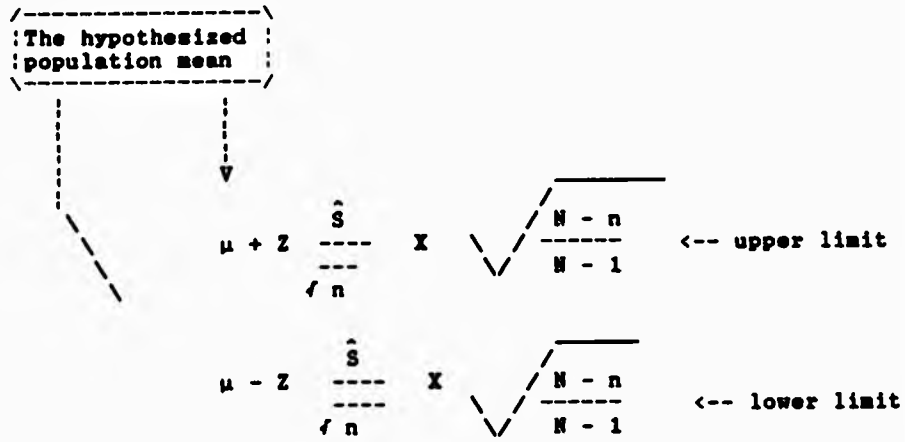
s	=	Sample standard deviation
x_i	=	The observation value
$\bar{x}$	=	The sample mean
n	=	Sample size

N = population size

The finite population factor is used where the total population is not infinite but known.

The second stage demanded finding the appropriate Z values at the 5% significance level. This was equivalent to 1.96 standard values. The third stage called for the use of the ordinary formula for setting acceptance limits when testing hypotheses which was (Levin, 1987: 382):

Equation 5A2.28 Finding acceptance limits of the hypothesized population mean.



The fourth (last stage) was merely comparing the calculated sample mean, $\bar{x}$, to the limits of the acceptance region to see whether or not it was included. If it was, then the null hypothesis of no difference between hypothesized mean and sample mean was accepted. If it fell outside the acceptance region, the null hypothesis was rejected and alternative hypothesis accepted.

When the prob value approach was followed to test the hypotheses, the aim was to find the standard errors of the mean around the hypothesized population value as (Levin, 1987: 370):

Equation 5A2.29 calculating the Z value for prob value

$$Z = \frac{\bar{x} - u}{s_{\bar{x}}}$$

The *Z* value indicating the difference between the sample mean and the hypothesized population mean was then related to the probability by referring to the Normal standardized table. It gives the *total chance* of the sample mean differing from the population mean by *Z* or more standard errors, that is the

$p \geq Z \leq$.

5A2.6.2.2 ESTIMATING THE POPULATION MEAN

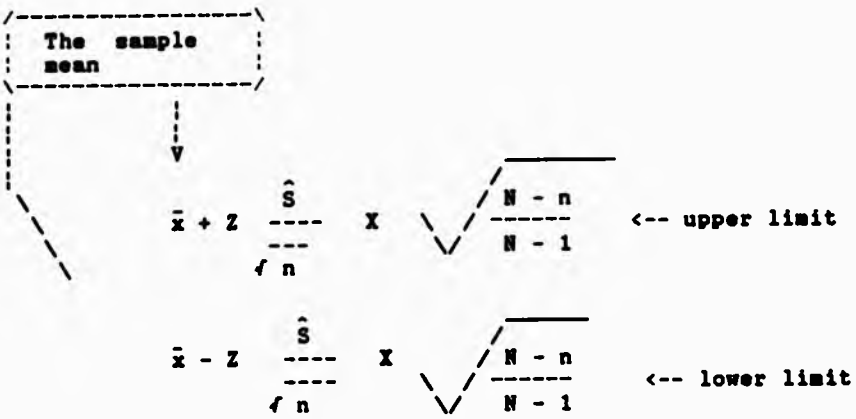
An interval estimate, as opposed to a point estimate was preferred. An interval estimate is a range of values used to estimate a population parameter, in this case the mean (Levin, 1987: 321). A statistic is a sample value or a characteristic of a sample such as the sample mean used to estimate a parameter (Rowntree,1987: 8-83, Levin, 1987:74). A parameter is the true population value (though it cannot be known for certain) (Rowntree, 1981: 82-83). An interval estimate indicates the error in two ways: by the extent of its range and by the probability of the true population parameter lying within that range (Levin, 1987: 321). The difference between an interval estimate and a point estimate is that the later is "a single number that is used to estimate an unknown population parameter (Levin, 1987: 321).

The interval estimate was preferred to the point estimate because the later is not a good estimator. This is so because it is insufficient since it is either right or wrong. This makes it less useful in communicating research findings since the extent to which it is wrong i.e. the range of error is not known. An estimator is a sample statistic used to estimate a population parameter. An estimate is a specific observed value of a statistic.

An interval estimate was deemed to be a good estimator because it met the four criteria of a good estimator. These are unbiasedness, efficiency, consistency and sufficiency (Levin, 1987: 322). Unbiasedness refers to, for example, the fact that "a sample mean is an unbiased estimator of a population mean because the mean of the sampling distribution of sample means taken from the same population is equal to population mean itself" (Levin, 1987: 322). Efficiency refers to the size of the standard error of the statistic. The mean would be said to be a more efficient estimator of the population mean than the median or the mode if its standard error is smaller. The third desirable property of a good estimator is that it should be consistent. A statistic is a consistent estimator of a population parameter if "as the sample size increases, it becomes almost certain that the value of the statistic comes very close to the value of the population parameter" (Levin, 1987: 322). The fourth requirement of a good estimator is that it should be sufficient. It is "sufficient if it makes so much use of the information in the sample that no other estimator could extract from the sample additional information about the population parameter being estimated" (Levin, 1987: 323).

In estimation, it was therefore deemed important to select the best estimator for the data being analysed. Returning to the variables where population estimates were required, it should be noted that when making these estimates, the four steps described in hypothesis testing, *'vide supra*, which were also used when dealing with differences between means were also applicable. Equation 5A2.24 used for calculating the estimated standard error of the mean, in the first step, was the same. The second stage calling for finding the *Z*- values was also the same. The only difference arose in the third stage when delimiting the upper and the lower confidence boundaries. The sample mean replaced the population mean since the population mean was being estimated by the sample statistic. This required the use of ordinary formula for setting confidence limit when estimating the population mean as (Levin, 1987: 347):

Equation 5A2.30 Estimating μ (the population mean): when S_x (the population standard deviation) is not known [S = s]



The fourth stage was merely reporting at a particular confidence level (for example at 95% or 99%) that the true population value would lie between the lower and upper boundaries (this would be within 1.96 or 2.58 standard errors).

5A2.7 ONE WAY ANALYSIS OF VARIANCE (ANOVA)

5A2.7.1 INTRODUCTION

It is clear from the preceding discussion that the chi-square analysis technique is used for categorical data for one or several samples. But the analysis of difference between proportions is specifically suitable for differences between proportions of two samples. Further, it has been shown that the analysis of the difference between means is suitable for investigating differences between two samples with interval or continuous data. Therefore these techniques were not suitable for finding overall differences among the three samples (students, graduates and businessmen) for interval and continuous variables, '*exempli gratia*', the salary of a leader and Likert attitude score on leadership code. The appropriate statistical technique for summarizing the results was one way analysis of variance (ANOVA) using Fisher's F -test. It enables testing for the significance of differences among more than two sample means (Levin, 1987:463, Becker & Harnett, 1987: 498). The one-factor ANOVA model describes "the relationship between the dependent variable, the various treatments (or populations) and the random error" (Becker & Harnett, 1987:502). The various treatments are regarded as the independent variable that may influence the dependent variable. The dependent variable is a quantity variable (continuous or interval) while the independent variable is a categorical variable. The dependent variables of this study were salary of a leader or attitude score. The independent variable was type of respondent i.e. student, graduate or businessman.

SA2.7.2 FORMAL STATEMENT OF THE HYPOTHESES FOR ANOVA

The aim in choosing ANOVA was to test whether the three samples represented by the sample means, $\bar{x}_1$, $\bar{x}_2$ and $\bar{x}_3$ were drawn from populations having the same mean, μ. A formal statement of the null and alternative hypotheses was:

$H_o : \mu_1 = \mu_2 = \mu_3$ <--- null hypothesis

$H_1 : \mu_1, \mu_2, \mu_3$ are <u>not</u> equal <--alternative hypothesis

In interpreting results, if it was concluded from the test that the sample means did not differ significantly, it was inferred that the respondents were in agreement on the average salary of a leader or in their attitude scores. This was so because the independently drawn samples supported each other. It implied that respondents had similar characteristics or views on this issue.

When it came to analysing whether small firms created more employment than large firms, ANOVA was used since several samples (classified according to year cohorts) had to be compared. In reality this analysis involved testing for differences between two samples, small and large, for each of the ten cohorts. Since the SPSSX computer programme was to be used in the analysis, it was found easier to compare sets of cohorts of firms on the level of employment creation between small and large firms for all the cohorts covering the same period i.e. the same length of time. This was better than testing the difference in job creation between small and large firms for each of the several cohorts. This meant two ten-year cohorts were compared. Then four five-year cohorts were analysed. This was followed by three three-year and lastly two two-year cohorts.

In using ANOVA the assumptions of each of the samples being drawn from a normal population and having the same variance, s^2 were met since the sample sizes were large enough (Levin, 1987: 464). The equation for determining the F statistic was:

Equation 5A2.31 calculation of the F statistic

$$F = \frac{\Sigma n_j (\bar{x}_j - \bar{x})^2}{K - 1} \Big/ \Sigma \frac{(n_j - 1)}{n^T - k} \times \frac{\Sigma(x_j - \bar{x}_i)^2}{n_i - 1}$$

This was simplified to

$$F = \frac{\text{Between-column variance}}{\text{within-column variance}} = \frac{s_j^2}{s_j^2}$$

The F statistic or ratio was then compared with percentage points of the F distribution with (k - 1) and (n_T - k) degrees of freedom (where *K* was the number of samples and n_T was the total population from all the samples).

As can be seen from the formula ANOVA is based upon the comparison of two different estimates of the variance, s^2, of the overall population (from which the samples, *'exempli gratia'* three in the case of the variable for the salary of a leader, were theoretically drawn). Thus the first of these two involved calculating the variance among the three sample means, $\bar{x}_1$, $\bar{x}_2$ and $\bar{x}_3$. Then the second estimate of the population variance was determined by examining the variation within each of the three samples themselves. The first and second variances of the

population were finally compared. Theoretically these two had tc be approximately equal in value when the null hypothesis was true since both were estimates of the same population. If the null hypothesis was not true, the two estimates had to differ considerably. The four stages in ANOVA would therefore be summarized as:

1. computing *'between-column'* variance. This involved determining the estimate of the population variance from the variance among the sample means

2. Calculating the *'within-column'* variance. This required determining a second estimate of the population variance from the variance within the samples.

3. Comparing these two estimates. If they were approximately equal in value, the null hypothesis was intuitively accepted.

4. Formally testing the F-ratio (the ratio of between-column variance and the within-column variance) by comparing it to the F-distribution value. If the F-ratio or statistic fell within the acceptance region, the null hypothesis was formally accepted otherwise it was rejected.

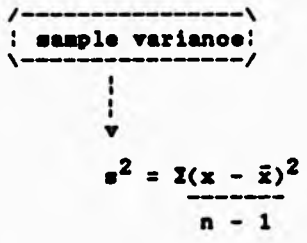
The process involving the four stages will now be demonstrated, by means of an example of the salary of a leader, in the remainder of this section.

5A2.7.3.1 CALCULATING THE VARIANCE AMONG THE SAMPLE MEANS

The first stage above in the analysis of variance demanded obtaining one estimate of the population variance from the variance among the three sample means of students, graduates and businessmen. Statisticians call this the *'between-column variance'*. This stage in turn required three steps. The first step called for the calculation of the variance among the sample means. This was to be used in the computation of the estimate of the population variance. The second step was finding the population variance using the sample variance. The third step merely needed substituting the sample variance among the sample means in order to obtain the first estimate of the population variance since the variance of all possible sample means of the population was not available. The analysis was dealing with samples not populations.

In implementing the first step, the sample variance was calculated using equation 5A2.32 (Levin, 1987: 465):

Equation 5A2.32 calculation of sample variance



where:

s	=	sample standard deviation
s^2	=	sample variance
x	=	value of each of the n observations
$\bar{x}$	=	mean of the sample
$n - 1$	=	number of observations in the sample minus 1

Source: Levin, 1987: 124 equation 4-11

However, since the analysis was dealing with three samples instead of one, a grand mean, *'id est'* the mean for the entire group for the three samples, had to be calculated. This was nothing more than summing the three sample means then dividing by the entire sample size for the three groups. This was the same as

summing the product of the sample proportion of each sample by its own mean for a weighted average of the sample means, using the relative sample sizes as the weights as :

Equation 5A2.33 calculation of grand mean

$$1.\ \bar{\bar{x}} = \frac{\Sigma \bar{x}_j}{\Sigma n_j} = \frac{\bar{x}_1 + \bar{x}_2 + \bar{x}_3}{n_1 + n_2 + n_3} = \frac{\bar{x}_1 + \bar{x}_2 + \bar{x}_3}{n_T}$$

which is the same as

$$2.\ \bar{\bar{x}} = \frac{\Sigma n_j(\bar{x}_j)}{\Sigma n_j} = \frac{n_1(\bar{x}_1)}{n_T} + \frac{n_2(\bar{x}_2)}{n_T} + \frac{n_3(\bar{x}_3)}{n_T}$$

where:

$\bar{\bar{x}}$ = grand mean (sample of all means)

$\bar{x}_1$ = mean of sample 1

$\bar{x}_2$ = mean of sample 2

$\bar{x}_3$ = mean of sample 3

n_1 = size of sample 1

n_2 = size of sample 2

n_3 = size of sample 3

n_j = size of sample j

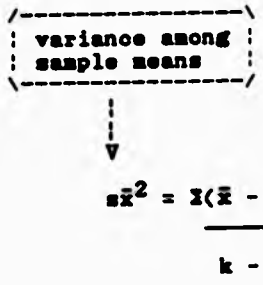
$\Sigma \bar{x}_j$ = sum of all sample means

$\Sigma n_j = n_T$ = total sample size.

source: created using information in Levin, p.484.

But since the analysis was working with three sample means and a grand mean, $\bar{\bar{x}}$ was substituted for x, $\bar{\bar{x}}$ for $\bar{x}$, and k (the number of samples) for n in equation 5A2.32, *'vide supra'* to obtain a formula for calculating the variance among the sample means as (Levin, 1987: 466) :

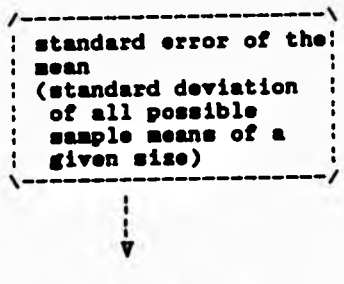
Equation 5A2.34 calculation of the variance among sample means



$$s_{\bar{x}}^2 = \frac{\Sigma(\bar{x} - \bar{\bar{x}})^2}{k - 1}$$

In step 2, the population variance was calculated using the standard error of the mean formula which is (Levin, 1987: 291 & 466):

Equation 5A2.35 calculation of the standard error of the mean

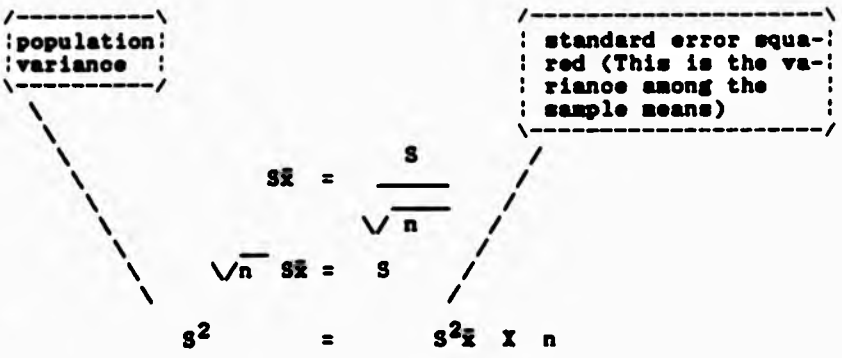


$$S_{\bar{x}} = \frac{S}{\sqrt{n}}$$

where: S = population standard deviation
n = sample size

But it is statistically known that the population variance is simply the square of the population standard deviation. Hence to solve for the population variance from the formula for the standard error of the mean above, the equation is simplified by multiplying both sides by $\sqrt{n}$ and then squaring them as:

Equation 5A2.36 population variance



Step 3 in stage 1 required substitution of the sample variance among the means for standard error squared. This was so because it is not normally available and therefore $S^2_{\bar{x}}$ is not known to calculate the population variance. But as in all other situations discussed earlier, the variance among the sample means (sample standard error squared) $s^2_{\bar{x}}$, already solved for in equation 5A2.34, being a good estimate, was substituted for $S^2_{\bar{x}}$ in equation 5A2.36 to calculate the population estimate as:

$$\hat{S}^2 = \hat{S}^2_{\bar{x}} \times n = \frac{\Sigma n(\bar{x} - \bar{\bar{x}})^2}{k - 1}$$

This equation could not be used as it stands but had to be modified because *n* represented one size. Yet there were three sizes of samples as seen above. This minor hitch was solved by

multiplying the square of each difference between grand mean and each mean i.e. $(\bar{x} - \bar{\bar{x}})^2$ by its own appropriate *nj* as:

Equation 5A2.37. First Estimate of the population variance

First estimate of the population variance ----> $$\hat{s}^2 = \frac{\Sigma n_j(\bar{x}_j - \bar{\bar{x}})^2}{k - 1}$$

where

$\hat{s}^2$ = First estimate of the population variance based on the variance among the sample means (the 'between-column variance')

n_j = the size of the jth sample

$\bar{x}_j$ = the sample mean of the jth sample

$\bar{\bar{x}}$ = the grand mean

k = the number of samples

5A2.7.3.2. CALCULATING THE VARIANCE WITHIN THE SAMPLES

Stage 2 in ANOVA demands a second estimate of the population variance based on the variance within the samples, statistically called, within-column variance. It measures the amount of variability within the column. The more variability there is, the larger the variance (Becker and Harnett, 1987: 500).

Equation 5A2.32 was the appropriate formula for calculating the variance within each sample. Since the null hypothesis assumed that the variances of the three samples were all equal, any one of the three sample variances (s_1^2, or s_2^2, or s_3^2) could theoretically have been used for the second estimate of the population variance. It is however statistically advisable to use

a weighted average of all the three samples in order to obtain a better second estimate of the population variance S^2 as (Levin, 1987:468):

Equation 5A2.38 second estimate of the population variance

second estimate of the population variance

$$\hat{S}^2 = \Sigma \frac{n_j - 1}{n_T - k} s_j^2$$

where

$\hat{S}^2$ = second estimate of the population variance based on the variances within the samples (the *'within-column variance'*)

n_j = the size of the jth sample (students, graduates or businessmen)

s_j^2 = the sample variance of the jth sample

K = the number os samples

$n_T = \Sigma n_j$ = the total sample size (from each of the three samples)

The weight assigned to s_j^2 in equation 5A2.35 above is its fraction of the total number of degrees of freedom in the denominator of the F ratio (see section 5A2.7.4)

5A2.7.3.3 COMPUTING AND INTERPRETING THE F STATISTIC

Stage three in ANOVA required comparing the two estimates of population variance by computing their ratio, which is called F as follows (Levin, 1987: 469):

Equation 5A2.39 computing the F-statistic

$$F = \frac{\text{First estimate of the population variance based on the variance among the sample means}}{\text{second estimate of the population variance based on the variances within the samples}}$$

$$F = \frac{\text{Between-column variance}}{\text{within-column variance}}$$

In interpreting the calculated ratio, the denominator is said to be a good estimator of s^2 (the population variance) whether the null hypothesis is true or not (Levin, 1987: 469). As regards the numerator, if the null hypothesis (that the mean salary of a leader for the three groups have equal effects) is true, then it is said that the numerator or the variation among the sample means of the three populations is also a good estimator of s^2 (the population variance). It is in this respect that it is said that the denominator and numerator should be about equal if the null hypothesis is true. Therefore on one hand, the nearer the F ratio comes to 1, the more inclination there is to accept the null hypothesis. On the other hand, the larger the F ratio, the more inclination to reject the null hypothesis and accept the alternative hypothesis (that a difference exists in the effects among the three sample means of the salary of a leader).

5A2.7.4 FORMAL TESTING OF THE F RATIO

The formal way of accepting or rejecting the null hypothesis, which is stage 4, is however accomplished through a comparison of the F ratio with the F distribution value. To use the F distribution, a pair of degrees of freedom are first computed. The first number of degrees of freedom refers to the numerator of the F ratio while the second refers to the degrees of the denominator. These are calculated as:

Equation 5A2.40 Finding degrees of freedom for F-test

Number of degrees of freedom in numerator of the F ratio	= (Number of samples - 1)
Number of degrees of freedom in denominator of the F ratio	$= \Sigma(n_j - 1) = n_T - K$

where

n_j = the size of the jth sample

k = the number of samples

$n_T = \Sigma n_j$ = the total sample size

It can now be seen that the weight assigned to s_j^2 in equation 5A2.34 was its fraction of the total number of degrees of freedom in the denominator of the F ratio.

The logic in finding the degrees of freedom is similar to that used in the case of chi-square earlier. Reflecting on the calculation of the numerator, the between column variance, shows that three values of $(\bar{x} - \bar{\bar{x}})^2$ were used, one for each sample to

calculate $\Sigma(\bar{x} - \bar{\bar{x}})^2$. Therefore once two of these values $(\bar{x} - \bar{\bar{x}})^2$ were known, the third was *automatically determined* and could not be freely specified. It is in this respect that it is said that one degree of freedom is lost. Hence the number of degrees of freedom for the numerator of the F ratio is always the number of samples less one (Levin, 1987: 471).

As regards the calculation of the denominator, all the three samples were used. For example, for the*j sample, nj* values of $(x - \bar{x})$ were used to calculate the $\Sigma(x - \bar{x})^2$ for that sample. Again once all but one value of these $(x - \bar{x})$ were known, the last was *automatically determined* and could not be freely specified. Thus 1 degree of freedom was lost in the calculations for each sample. This is why 1 is subtracted for each sample for a total number of degrees of freedom equivalent to the number of samples, *k* in the above formula.

5A2.7.5. ILLUSTRATION OF HOW ANOVA WAS USED

5A2.7.5.1 Stage 1:calculating the variance among the sample means

An illustration will now be presented to show how the F ratio and F test were done. Given the summarised data as in Table 5A2.7 and the null and alternative hypothesis (that the means are equal and are not equal (respectively) presented in the introduction, the first stage was to find the first estimate of population variance.

Table 5A2.7 Summary of data for students, graduates and businessmen

Type of sample	students	graduates	businessmen
sum (of total salary of a leader)			
mean = $\bar{x}$	16095	22733	22560
sample size = n	n_1 = 166	n_2 = 224	n_3 = 177
standard dev. = s	15185	19912	19817

Before using equation 5A2.34 for stage 1 in calculating the first estimate of population variance, the grand mean was calculated as:

Equation 5A2.33 calculation of grand mean

$$\bar{\bar{x}} = \frac{\Sigma n_j(\bar{x}_j)}{\Sigma n_j} = \frac{n_1(\bar{x}_1)}{n_T} + \frac{n_2(\bar{x}_2)}{n_T} + \frac{n_3(\bar{x}_3)}{n_T}$$

$$= \frac{166(16095)}{561} + \frac{224(22733)}{561} + \frac{171(22560)}{561}$$

$$= \frac{166(16095) + 224(22733) + 22560}{561} = \frac{11621722}{561}$$

$$= K20,716$$

It was easier to use a table for the calculation of the first estimate using equation 5A2.37 as:

Equation 5A2.37 calculation of the first estimate of population variance

$$\hat{s}^2 = \frac{\Sigma n_j(\bar{x}_j - \bar{\bar{x}})^2}{k - 1}$$

n	$\bar{x}$	$\bar{\bar{x}}$	$\bar{x} - \bar{\bar{x}}$	$(\bar{x} - \bar{\bar{x}})^2$	$n(\bar{x} - \bar{\bar{x}})^2$
166	16095	20716	-4621	21353641	3.5447044^9
224	22733	20716	2017	4068282	9.1129674^8
171	22580	20716	1844	3400336	5.8145746^8

$\Sigma n_j (\bar{x}_j - \bar{\bar{x}})^2$ --->5.0374586^9

$\hat{s}^2 = \frac{\Sigma n(\bar{x}_j - \bar{\bar{x}})^2}{k - 1}$ <---- equation 9.37

$= \frac{5037458600}{2} = 2,518,729,300$ or 2.52^9 <-- Between column variance

5A2.7.5.2 Stage 2:Calculation of the variance within the samples

Stage 2 in ANOVA required a second estimate of the population variance based upon the variance within the samples, using formula 5A2.38. It was easier to do it in form of table 5A2.9.

equation 5A2.38 calculation of second estimate of population variance

$$\hat{s}^2 = \sum \frac{n_j - 1}{n_T - k} s_j^2$$

Students		Graduates		Businessmen	
sample mean:		sample mean:		sample mean	
$\bar{x}$ = 16095		$\bar{x}$ = 22733		$\bar{x}$ = 22560	
$x - \bar{x}$	$(x - \bar{x})^2$	$x - \bar{x}$	$(x - \bar{x})^2$	$x - x$	$(x - x)^2$
14400 - 16095	28.7^5	3600 - 22733	17.6^7	1200 - 22560	11.2^7
3000 - 16095	17.1^6	48000 - 22733	63.8^7	60000 - 22560	14.0^8
. .	. .	. .	. .	. .	. .
. .	. .	. .	. .	. .	. .
. .	. .	. .	. .	. .	. .
16095 - 16095	90.3^2	1500 - 22733	59.8^6	10000 - 22560	15.8^7
$\Sigma(x - \bar{x})^2$	= 127395	$\Sigma(x - \bar{x})^2$	= 156098	$\Sigma(x - \bar{x})^2$	=160144

sample variance=s_1^2 = 2.3058425

sample variance= s_2^2 = 3.9848774^8

sample variance=s_3^2 = 3.9271349^8

$$\hat{s}^2 = \sum \frac{n_j - 1}{n_T - k} s_j^2$$ <--- equation 9.38

$$= \frac{165(2.3058^8)}{558} + \frac{223(3.9849^8)}{558} + \frac{170(3.9271^8)}{558}$$

$$= 88,163,507 + 158,452,990 + 119,643,890$$

$$= 346,260,390$$ <--- second estimate of the population variance based on the variances within the samples (the within-column variance)

5A2.7.5.3 **Stage 3. The F hypothesis test: computing and interpreting the F statistic**

The third stage in ANOVA compared the two estimates of the population variance by computing their ratio, called F using equation 5A2.38 as follows:

$$F = \frac{\text{Between-column variance}}{\text{within-column variance}}$$

$$F = \frac{2518729300}{346280390} = 7.274 \quad \text{<----- F ratio}$$

It has been discussed earlier that the denominator and the numerator had be about equal if the null hypothesis was true. Referring to the calculated F-ratio above, the null hypothesis could intuitively be rejected since the F ratio of 7 was very different from 1.

Using a formal F distribution test required, first determination of the degrees of freedom for the numerator and denominator, by applying equation 5A2.40 as:

Equation 5A2.40 determining number of degrees of freedom

Number of degrees of freedom in Numerator of the F ratio	= (Number of samples - 1)
	= 3 - 1 = 2
Number of degrees of freedom in the denominator of the F ratio	= $\Sigma(n_j - 1) = n_T - K$
	= 168 + 224 + 171 = 561 - 3 = 558

From the F distribution table, with 2 degrees of freedom in the numerator and 558 in the denominator, the value was 4.61 at .01 critical value. This therefore indicated that the calculated F value statistic fell outside the acceptance region, *'id est'* it was larger than the tabled value of 4.61. This indicated that there was a difference in the mean salary determined by the three groups.

5A2.0 STUDENT t-Test

5A2.0.1 INTRODUCTION

Student's t-test was used in analysing differences in employment creation between small and large firms for firms formed in one cohort year compared to several cohort year firms which also existed for the same period. This for example meant comparing a group of small firms with large firms, which were formed in 1965 (and existed for the next ten years up to 1975) and those which were formed in 1975 and existed for the next ten years up to 1985. This required finding differences in means between small and large. But since the sample size i.e. the number of firm cohorts which existed for the same period for example 10, 5, 3 or 2 had too few cases, maximum of five (groups of firms which existed for one year), the appropriate test for differences of means was the student t-test. It is used whenever "the sample size is 30 or less and the population standard deviation is not known" assuming that the population is normal or approximately normal (Levin, 1987: 342). It is called student t-test distribution because William Gossett, published his research on the early theoretical work on t-distribution under the pen-name of student. His employers, Guinness Brewery in Dublin, Ireland did not permit employees to publish research in their names. Student t-test or simply t-test uses the standard error of the differences between means. It is "... calculated exactly as in a Z-test, but re-named the 't-test'" Rowntree (1981: 139). But for the necessary proportions either side of a given value, reference is made not to the normal distribution but to the t-distribution.

The distribution is similar to the normal distribution in being symmetrical about a mean of zero, and bell-shaped. But it is flatter (in that it is more dispersed) and its dispersion varies according to the size of the sample. This means it is lower at the mean and higher at the tails than the normal distribution. Being higher at the tails implies that the proportion of extreme differences between two samples is assumed to get greater and greater as the sample size gets smaller. The consequence is that smaller samples are more likely to give significant-looking results when there is no real difference. This is because in small samples, the sample standard deviation under-estimates population standard deviation more than half the time (Rowntree, 1981: 139).

Using the normal distribution would have lead to claiming significant differences where none existed. The t-distribution was therefore determined to be better because the smaller the samples, the larger the difference demanded by the t-test. This is necessary because since big differences occur more frequently as samples get smaller, the probability of getting a significant result would increase as the sample size decrease (see Levin, 1987: 342-347; & Rowntree, 1981: 139-141).

Since t-test analysis is basically the same as Z-test described in section 5A2.6.2.1, it will not be described here. But the alternative approaches to building or calculating the dependent variable, employment created, and the approach selected will now be described.

However, before leaving this section, it is important to note a few differences in applying the t-test. First, Z value in equation 5A2.28 was replaced with the t-test value from t-tables. Second, there is a different t-distribution for each of the possible degrees of freedom. Degrees of freedom are the number of values than can be freely chosen. It is calculated as: n - 1

where *n* equal the sample size. Third, in using the table, care need be taken since it does not focus on the chance that the population parameter being estimated will fall within the confidence interval. Instead, it measures the chance that the parameter will not be within the confidence interval, i.e. it will lie outside it. Fourth, the table gives values for a two-tailed. Therefore in determining whether or not large firms created more employment than small ones, the probability had to be divided by 2 for one tailed.

SA2.8.2 ALTERNATIVE APPROACHES TO CALCULATING EMPLOYMENT CREATION

Employment data analysis was concerned with longitudinal employment creation or entry rate and the number of jobs created in an overall period of 20 years. This period was further sub-divided into several periods of 10, 5, 3, 2 and one year cohorts, making a total of 14 groups of firms to be analysed. That is there were two 10 year cohorts from 1965 to 1985. The second group composed of four 5 year cohorts i.e. those formed in 1965, 1970, 1975 and 1980. The third was two 3 year cohort of firms i.e. 1980 and 1983. The fourth group of firms comprised three 2 year cohorts. The last contained three 1 year cohorts.

Job creation can basically be measured using the components approach. This can be gross or net approaches. A variation between these two results into three main methods. These three approaches are normally used in determining the number of jobs created.

The first of these involved:

a) Lloyds/Dickens' base year approach;

b) gross new job method and

c) O'Farrell's base year approach, a modification of the net method.

The second variation was referred to as size distribution group cohort (SDGC) for lack of a better term. The third approach was the employment built up method.

All the three approaches can basically be useful. However, each may be suitable for a particular job creation promotional objective. Secondly, presence of data constraints, as was the case in this study, may point to the need for adapting one or a combination of any of them. All these were initially considered, in this research, before ultimately opting for one. They utilise the approaches used by O'Farrell (1981:38-50) and formulae applied by Lloyds and Dickens (1979:2). These methods are next presented, starting with the most preferable one. Reasons for selecting it and rejecting the others are also presented.

5A2.8.2.1 SIZE DISTRIBUTION GROUP COHORT

The size distribution group cohort (SDGC) method of O'Farrell is primarily a base year index approach, presented next. But it differs from the pure base year index because it generally offers minor modifications in the treatment of new entries and survivor firms during a period of study. It also takes into account net changes. The following formula used by Lloyd and Dicken was adapted:

Equation 5A2.41 Calculation of net employment growth

$$NG = TEE - TEB$$

Where:

NG = Net Growth of workers in firms of a size group existing at the beginning of a period.

TEE = Total Employment in all expanding firms of a size group at the End of a period.

TEB = Total Employment in all expanding firms of a size group at the beginning of a period.

After serious consideration, the size distribution group cohort method was selected for use in this research study since it was the best of the available methods. This was done in order to capitalise on its advantages and to avoid the weaknesses of the other methods discussed later in this section.

The size distribution group cohort method was selected essentially for three reasons. These were to:

1) ensure that the analysis was comparing the same groups of firms at the beginning and at the end of the period;
2) avoid the methodological weaknesses of incapacity to measure job losses, explained later; and
3) be able to measure SIDO's contribution to firm and job creation during its three years of existence,

The most outstanding reason out of the three for selecting the size distribution group cohort method was that since the comparison was for firms over the same period of time, this was deemed to be helpful in determining whether or not small firms created more employment than large firms. It compensates for the major criticism of base year related methods, namely that they fail to trace the same firms over two points of time. The different periods, in a sense acted as controls. Further, it made it was possible to analyse whether firms formed in later years for example in 1983, after the formation of SIDO, would generate more employment. The argument being that if firms formed earlier on in the periods indicated above, would have not grown extensively over a ten, five, or three periods, there was no '*a priori*' reason to believe that firms formed later would have grown to a larger extent had they been given time to operate for more years. This method involved the use of size matrix.

In the case of this study, the interest was to use it in comparing job creation in sizes of groups of firms formed in one year, for example, in 1985 and surviving a short interval period of a number of years, for instance, 10 years up to 1975, with firms established at the end of the first interval period, 1970 which survived at least until the end of the next 10 year period, i.e. 1975. Next 4 five year period cohort of firms were compared. That is, the first of these 4 groups comprised firms that were started in 1985 and survived a 5 year period up to 1970. The second cohort group composed of firms that were established at the end of the first interval period, 1970 which survived at least until the end of the next 5 year period, i.e. 1975. The third group was made up of firms that were formed in 1975 and survived until 1980. The fourth group was for the cohort of firms that were formed in 1980 and survived until 1985.

In addition to analysing firms over longer periods, the size distribution method, was found to be practical to shorter periods. This was applied to firms that were formed between January 1980 and December, 1985.

Thus firms formed in 1980 and operated up to 1982 (three years before the formation of SIDO), were compared with firms formed in 1983 and operated for three years up to December, 1985, the last year covered by the period of study. Next firms that started in 1981 and operated for two years, up to December, 1982, were compared with those that commenced their businesses in 1983 and operated up to 1984. Last, employment generation in the first year of operation of those that existed for one year, that is January to December, 1984, were contrasted with those that started in January, 1985 and operated up to December, 1985.

The approach of analysing firms over shorter periods, January 1980 and December, 1985 was done for two important reasons. First this was intended to take into account of firms established three years before and after the formation of SIDO in December, 1982. It was thought this would allow the investigation of the influence of SIDO in job creation.

Second, this method also enabled discovering the number of jobs created by a cohort of firms established in at least the same year and operated for the first year. This idea was imported from the employment built up method which utilizes this process of accounting for employment created within a year. This was done to overcome one of the major shortcomings of base year related methods. The criticism is that since they compare net job changes over longer periods of time such as five or ten years, they inherently overlook jobs created by many small firms in shorter periods. This is said to be very likely because many small firms start and die within a very much shorter period of time, in most cases, within three years.

The inability of comparing firms over the same interval period and the problem of disregarding firms created between the periods covered by a study, indicated above, are two of the major weaknesses of the base year method, which will soon be picked up for discussion to show why it was not chosen. Notwithstanding the decision to limit the analysis to the size distribution method, it had two inadequacies. First, in applying this method, there is an *'a priori'* assumption that an information base of birth records existed to enable the extraction of firm cohorts established in the years of interest stated above, to take place. As it has been stressed several times, this was unfortunately not the case.

Second, the ten and five year periods were not suitable to measure SIDO's influence in firm and job creation since it had been in existence for three years only at the time of the study. Therefore, to redress this last obstacle, shorter periods were also included as presented earlier.

5A2.8.2.2 BASE YEAR APPROACH

O'Farrell's base year approach (a modification of Lloyd's and Dicken's formula given below), is one of his three approaches. It is a net job generating process, but it is better than the gross new job creation process (discussed next) because it traces the same band of firms. It is basically concerned with isolating sets of firms or firm cohorts in different size categories, which were in existence in the base year, for example for this study, those formed in 1965 and following their performance until the end of the period of study of (1985). But it is not concerned with identifying firms formed between 1965 and 1985.

This approach takes into account the net changes, just as in the case of the size distribution group cohort. This is useful in knowing which size cohort groups creates more employment over a period of time. It has however, two defects rendering it unsuitable for use in this research.

First, it fails to consider firms and jobs created in those firms between 1965 and 1985 periods. It was possible that political, economic and environmental changes could have taken place which could have drastically altered the job creation

capacity of firms formed later, had they been considered or given the same period of existence. The reasoning being that had such firms been given the same period of existence as those formed earlier, which had been included in the analysis, then differences in job creation could be explained in terms of their differences in their ability to create jobs and not necessarily attributed to their differences in the length of their existence.

The second problem was that the method of collecting data using questionnaires, which was basically used in this study, was subjected to a possibility of being unable to generate correct information. This probability was based upon the reasoning that responses could have relied in some cases upon memory. The accurateness of such data could therefore not be guaranteed, especially in very small firms, where records are normally not kept. It was for the purpose of reducing these disadvantages, that the size distribution group cohort (SDGC) method of O'Farrell was chosen.

5A2.8.2.3 THE GROSS NEW JOB CREATION METHOD

The gross approach was in a sense better than the net new job approach (taken up next) for this research because it avoids possible "dangerous blind spot" of too much concern with the net effects. It allows identification of areas suitable for encouraging small business creation and growth (Dickens, 1979:6-7). This approach avoids the methodological weaknesses, referred to above, as it concerns itself with jobs created in surviving firms only. This advantage also exists in the size distribution

group cohort. The formula for calculating the total gross new jobs created is:

Equation 5A2.42 calculation of total gross new jobs

$$TG = ES + LB + EB$$

Where

TG	=	Total Gross New Job Generation for a period of time
ES	=	Job Generation in Expanding Survivors
LB	=	Jobs in Local new Births
EB	=	Job generation from external sources - Branch in-movers.

Although this approach is biased since it excludes job losses, the bias, equally applies to both small and large firms. In any case, this approach was suitable to this study since the concern was to find out the job creation differences between small and large and not necessarily net changes in the areas of the study.

However, the two major weaknesses of this method are first, that it concentrates on job creation and neglects jobs lost. Second, it does not trace the same firms over a period of time. But is more concerned with total changes. It was for this second reason that it was not singled out for use.

5A2.8.2.4 NET NEW JOB APPROACH

One of the major criticisms of Birch's findings in using the gross job creation approach has been its neglect of the total net jobs created over a long period of time. The reasoning is that the gross job approach presents only a partial truth as jobs lost are not taken into account. This omission is very serious

particularly in the small firm sector since jobs created do not last. Therefore a policy that is concerned with job creation prospects in the long run should analyse not only gross jobs but also net changes. The appropriate general formula is:

Equation 5A2.43 calculation of total employment

$$TE = BE + E - C + BC$$

where:

TE	=	Total Employment
BE	=	Base year Employment
E	=	Entries of new firms
C	=	Closures
BC	=	Balance of Change in in-situ survivors (i.e. new job openings or losses)

The crude employment entry and closure rates may be calculated using the following formulae (crude because of relocations):

$$\text{Entry Rate} = \frac{\text{Workers in new openings, 1985-1985}}{\text{Total workers in base year, 1985}} \times \frac{1}{100}$$

$$\text{Closure Rate} = \frac{\text{Workers in closures, 1985 - 1985}}{\text{Total workers in base year, 1985}} \quad \frac{1}{1000}$$

In the first formula, it will have been noticed that the major components of the formula are two: job openings and job closures. In this study, this would refer to each of the fourteen year cohorts referred to above between 1985 and 1985. The first component of these two divisions could further be sub-classified into three individual elements:

1) births of firms, E, (new openings of new businesses) since 1985;

2) new job openings in surviving firms over the period 1985 to 1985 (BC positive side); and

3) internal relocations of the same firm, within the same town.

The balance of change of in *'in situ'* survivors (BC) is calculated by subtracting the employment level in base year i.e. 1985 from total employment level in 1985, for each of the firms and summing up the differences. The result would be either positive (job gains) or negative (job losses).

The second component of the formula has two elements:

1) deaths through closures of an entire plant or a firm and

2) job losses through *'in situ'* shrinkages i.e. reductions (BC negative side).

In this research, this method could not be used without modification for four main reasons. First, the data collection methodology could not reveal firm closures. Second, firm closure information especially small firms was anticipated to be difficult to tress, even if another method was used, since no reliable records are normally kept for small business failures (even in developed countries). A third criticism, normally labelled at the net change approach, which was also true for Zambia, is that it is not be very useful where an incentives policy is aimed at encouraging new firm creation.

The fourth weakness of the pure net job creation approach (which the pure gross approach also suffers from as it has already been shown) was that it failed to answer the query of this study. That is, finding disparities if any between large and small firms in their capacity of employment creation *'vide*

supra'. This was so because it was feared that measuring the role of existing *'in situ'* and relocatee small firms of particular size thresholds would be difficult. This problem normally arises because existing firms may change their size categories (e.g. capital or employees) over a period of time.

The fifth reason was that this formula was more suitable for regional study. In such studies, the main objective is to find total employment existing in a particular geographical area over a period of time. It is therefore inevitable that this can best be found by summing the beginning employment inventory, jobs created by new firms, job losses through firm closures and net job changes in each surviving firm (both *'in situ'* and relocatees). In such cases, it becomes imperative that all new firms and their related jobs are also accounted for. In addition, it is mandatory that relocatees are traced to make sure that job changes in a particular area resulting from firm transfers from one region to another are identified. Since this study was only concerned with which of the two groups of firms created more employment, the sub-components all new firm formations and all relocatees, were irrelevant. It was for these reasons that the pure net job approach was not preferred.

5A2.8.2.5 EMPLOYMENT BUILT UP METHOD

This method enables discovering the number of jobs created by a cohort of firms established in at least the same year and operated for the first year. It was one of the two important reasons that this approach of analysing firms over shorter periods, January 1980 and December, 1985 was combined with the

size distribution group cohort method. But such an omission would not have been as serious as the second reason for the use of this method.

The second reason was to take into account of firms established three years before and after the formation of SIDO in December, 1982. It was thought this would allow the investigation of the influence of SIDO in job creation. The ten and five year periods were not suitable to measure SIDO's influence in firm and job creation since it had been in existence for three years only by the time of the study. Therefore, to remedy this last obstacle, shorter periods were also included as presented earlier.

In conclusion, the size distribution method, which combined most of the advantages of the three main methods was found to be the most appropriate for this research project. Before leaving this section, it is important to get a common understanding of the interpretation of employees.

5A2.8.8 DEFINITION OF EMPLOYEES

In this research, the number of employees referred to people being engaged in work. Thus it related to both paid and no-paid persons. This included the proprietor and his family members. Exclusion of owners could have resulted in underestimation of employees especially for very small firms where no salary paid persons are sometimes engaged, as for example Miller realised (1980:31). Including these people is the better approach since this project was concerned with determining the level of self-employment.

5A2.9. LIKERT SCALE TECHNIQUE

5A2.9.1 INTRODUCTION

In analysing attitudes of students, graduates and businessmen towards leadership code, chi-square analysis, described in section 5A2.4, was applied for each of the three responding groups. The purpose was to have an overall impression of the respondents' views. To find overall differences among the three groups, chi-square was again found useful. However to ascertain an overall attitude for each of the three groups, Likert scale was the most appropriate technique. This required the application of the median and quartile analysis in order to discover the percentage of respondents who were below the average. In order to learn whether there were any differences among the three groups in their overall attitude, one way analysis of variance, described earlier was found befitting. But in order to determine the intensity of endorsing each of the statements, factor analysis was the relevant statistical technique. This was so because it arranges the factors in a descending order according to how large the eigenvalues are (*'vide infra'*, Appendix 5A3.3.2.3 and 5A3.3.2.4.2). This was done for each of the groups in the first place and for a combined group in the second place.

All the techniques mentioned in this introduction, except Likert Scale and factor analysis have already been dealt with in the preceding sections. This discussion was therefore devoted to Likert Scale. Factor analysis, which was also adopted for analysing factors that would influence students and graduates to work in small or large firm was the subject of Appendix 5A3.

The ensuing discussion first explained the terms:

1) attitude and
2) test with its two major classifications.

This was followed by descriptions of:

3) the underlying assumptions of linearity about attitude measurement;
4) writing of attitude statements and how attitudes were were measured;
5) principles in constructing and evaluating an attitude scale and
6) Likert scale and why it was selected, its limitations and the relevant statistical technique - the quartile analysis.

5A2.9.2 DEFINITION OF AN ATTITUDE

There appears to be a great consensus on what an attitude means. According to Oppenheim (1966: 105):

> ... most definitions seem to agree that an attitude is a state of readiness, a tendency to act or react in a certain manner when confronted with certain stimuli.

He points out that an individual's attitudes on various issues are present but dormant most of the time. But they become expressed in speech or other behaviour only when the object of the attitude is perceived. A person may for example have very strong attitudes on leadership code. But these are aroused and expressed when confronted by a questionnaire. Oppenheim argues that attitudes are reinforced by beliefs (the cognitive component) and often attract strong feelings (the emotional component) that will lead to particular forms of behaviour (the

action tendency component). Attitudes can be changed through the processes of communication, advertising, education, conversion, propaganda, brainwashing etc. However the strength and pervasiveness of attitudes differ from person to person and within the same person, from one issue to another. For further discussion of the nature of attitudes see Kretch and Crutchfield[1] or Katz and Stotland[2] (quoted from Oppenheim, 1966: 106).

5A2.9.3 DEFINITION OF A TEST

An attitude can be tested or measured. The purpose in such a test is to decide whether to accept or reject a particular hypothesis as for example those stated in this study. Other purposes of a test are classification (deciding which of the many possible assignments or treatments a person shall receive) and evaluation (evaluating treatments such as an arithmetic test in a school or management tests). A test as used in this study may be defined as a systematic procedure for comparing the behaviour of two or more persons (Cronbach, 1960: 20-21). This definition is of course inclusive of not only questionnaires for obtaining responses on personality, but also measurements using apparatus, laboratory procedures for observation of social responses, systematic records collected on an industrial production line. It can also be extended to cover measures of animal behaviour and measures of non-behaviourial characteristics.

5A2.9.3.1 OBJECTIVITY IN TESTING

Tests vary in their degree of objectivity. Cronbach (1960: 23) states:

> A fully objective test is one in which every observer or judge seeing a performance arrives at precisely the same report

Hence the more subjective the observation and evaluation, the less the judges will agree. Tests in which the subject selects the best of several alternative answers are referred to as "objective tests". This approach was followed in this study by preparing statements that respondents were to indicate how strongly they agreed or disagreed with it.

5A2.9.3.2.1 PSYCHOMETRIC AND IMPRESSIONISTIC TESTING

There are two philosophies of testing, the psychometric and impressionistic. The former is based upon numerical estimates of single aspects of performance, built on the famous dicta of E. L. Thorndike that "if a thing exists, it exists in some amount" and "if it exists in some amount it can be measured" (quoted in Cronbach, 1960: 24). The second type of investigation requires a comprehensive descriptive picture of the whole individual by a sensitive observer who looks for significant cues by any available means and integrating them into a total impression. The argument, by the impressionist, Cronbach (1960: 25) states is that:

> studying one trait or element at a time is,...no substitute for considering the person as a whole

Cronbach points out:

> .... each approach has merit and each has its special limitations... Neither style can be adopted to the exclusion of the other. The measurer must fall back upon <u>judgement</u> [emphasis mine] whenever he applies information from scores.... .

The extent to which each is applied in a particular testing situation depends on definiteness of tasks employed, control of response, objective recording of basic data, formal numerical scoring and numerical combination of data to reach decisions and critical validation of interpretations. For more discussion see Cronbach, 1960 25-29. But the main characteristics are: a) definiteness of task. In psychometric, the test is structured in that the exact manner in which the task is to be explained to the subject is predetermined.

b) recognition vs Free Response. Psychometric tests are designed in recognition form allowing greater control of responses and making scoring less impressionistic. These are preferable because they can be objectively scored and are less subject to misinterpretation of questions than the the free response form.

The impressionistic approach allows free response. The most important reason why many testers prefer the free response form is that it "permits observations which illuminate the scored aspect of performance" (Cronbach, 1960: 28).

c) Product vs Process. A chief difference between psychometric and impressionistic testing is that the former concerns itself with the tangible product of the performance-the answer given or block tower constructed while the impressionistic tester watches the subject at work in order to form a general opinion.

d) Analysis of Results. It follows that formal scoring plays a large part in the psychometric test while it is a very minor part in the work of the impressionistic tester. It is

however preferable that in individual testing, both scores and descriptive information be taken into account. In decision making for example, one can apply some formal rule to the various facts or can combine them impressionistically. Cronbach observes that the psychometric testers insistence on numerical scores influences his choice of tests. He however warns (p.27):

> In this concentration on measurable variables, the tester may ignore equally pertinent aspects of the individual for which no scorable instruments have been developed. ... These scores, however, tell only a small part [emphasis mine] of the story [and the researcher] should go on to investigate [other aspects] even if none of these questions can be answered by a number on a scale, [emphasis mine] or taken into a statistical formula.

e) **Emphasis on critical validation.** Psychometric testers are taught to distrust judgements based on tests and observations. Ideally their numerical scores are accompanied with a warning regarding the error of measurement, and every prediction with an index showing the probability of its coming true. The impressionsist is less likely to carry out formal validation studies, often being satisfied with impressions gained from another. Validation of scores qualitative interpretations is therefore (p.28)

> much more difficult than validation of scores and requires a greater readiness for self-criticism on the part of the [researcher].

In this study both approaches were followed as verbatim statements were taken in addition to scoring their responses. This was for the reasons given above that statistics should be supplemented with impressionistic evaluations to derive most benefits from such attitude

studies. It was anticipated that the verbatim responses would provide valuable information which would not otherwise been accomplished through any statistical formula. This approach of combining statistical findings with respondents' contributions is normally recommended though analysis is time consuming and interpretation requires careful approach. The method used to interpret these supplementary statements was content analysis. It is briefly explained in section 5A2.10.

5A2.8.3.2.2. CLASSIFICATION OF TESTS

Tests may therefore be broadly classified into those that seek to measure the maximum performance of the subject (how well a person can perform at his best) and those that describe his typical performance i.e. what he is likely to do in a given situation or in a broad class of situations (Cronbach, 1960: 28). Tests of personality (the subject of this study) habits, interests and character fall in this category. Behaviour observations (of the later type) are studied when the subject is "acting naturally" when observations may be made in standardized test situations or "natural" conditions. Self report devices are used to give an opportunity to the subject to observe himself by completing a self-report through a questionnaire. It is "generally agreed that personality questionnaires should not use the word test in their titles" if the instrument merely asks the subject a series of questions about himself, as he can describe himself in any way he pleases, to reduce misinterpretation. In this study the term attitude questionnaire will be adopted instead of "test"

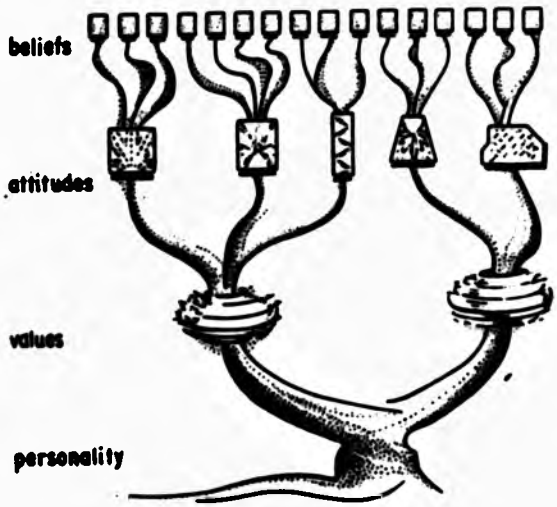
5A2.9.4. UNDERLYING ASSUMPTIONS ABOUT ATTITUDE MEASUREMENT

Since attitudes are labelled by their object, for example, leadership code, it was important to understand what attitude was being measured and the scale that was being used for measuring it. This was of vital importance so that the study did not end up measuring something else or only part of the attitude or too many attitudes at once. In order to measure an attitude correctly it was necessary to know the relationship about the statements that were going to be presented to respondents.

Oppenheim (1966: 107) has argued that the traditional view of perceiving attitudes as straight lines, running from positive, through neutral, to negative feelings about the object in question has been rather primitive. Thus the model of linearity though makes measurement easy has no proof. Attitudes may therefore be viewed as "concentric circles or overlapping ellipses or three-dimensional cloud formation" he has pointed out. Attitudes have many attributes, not only content, but also intensity. It has also been established that there is a U-shaped relationship between the attributes of intensity and of content (p.108). This implies that the more extreme attitudes (either positive or negative) are usually held with much vehemence, whereas the more neutral position may be defended with far less intensity. This finding about intensity Oppenheim states, has led to a suggestion by Suchman (1950) that to find the neutral point on a scale one must look for the point of minimum strength or intensity. Some attitudes last longer than others. Likewise some attitudes are deeper, touching upon one's fundamental philosophy

of life while others are superficial. Oppenheim (p.109) refers to sociologists rough differentiation among four various levels of attitudes, thought of as deeper versus more superficial or relatively stable versus relatively changeable; and more general versus more specific. The most superficial one is referred to as beliefs, the next one as attitudes, a deeper level, as values or basic attitudes, and still a deeper level, as personality. These levels should not be thought of as different layers of a cake, but as relationships and patterns of connection among these layers, sometimes referred to as the tree model (see fig.5A2.8). For more detailed discussion refer to Hans J. Eysenck, The Psychology of Politics (London: Pontledge & Kegan Paul, 1954) particularly chapter 4).

Fig. 5A2.8 Tree Model of an attitude



Source Oppenheim, 1966, Fig. 5.1

Thus studying of what appears to be a simple attitude towards owning of businesses by Zambian leaders, may not be that simple due to problems of unidimensionality. This results from the complex nature of attitudes particularly the underlying deeper attitudes making up the personality of an individual. Instead of measuring attitudes towards leadership code, it is possible to end up measuring deeper related / associated attitudes of political beliefs such as dislikes of the present political system or their values on honesty of political leaders.

5A2.9.5 MEASUREMENT PROCEDURES AND WRITING OF ATTITUDE STATEMENTS

As time was limited and attitude section was a minor portion of the whole study it was not possible to have initial in-depth-interviews:

1) to explore the origins, complexities and ramifications of the attitude areas in question, as recommended (Oppenheim, 1966: 112-113). This is said to be essential in order to decide more precisely on what was wanted to be measured.

2) to get vivid expressions of such attitudes from the respondents in a form that might make them more suitable for use as statements in an attitude scale.

A total of 15 attitude statements composing item pool, were therefore written by the researcher based upon three sources:

1) the Zambian constitution dealing with the leadership code;

2) his general knowledge about leadership code;

3) statements made or views expressed in the Zambian press about failure of leaders to abide by the leadership code; and

4) government officials' pronouncements about the code.

The main interest of the researcher was to find out whether leadership code was generally supported by the Zambian population. It was conceded that it was not possible to survey a representative sample of the Zambian population given the sampling design. But it was thought that by interviewing not only three divergent groups of the Zambian community *'id est'*, students, graduates and businessmen, but also knowledgeable enough to understand leadership code, could unveil interesting aspects of leadership code, common to the rest of the Zambian society.

The generated statements were intended to measure, attitude i.e. the level above value. They were thought to be meaningful, interesting and exciting, some of them provocative to their underlying deeper personality. These were such statements as those suggesting that leadership code should be abandoned. Others were stated that the code was faithfully practised by all Zambian leaders. Still more others said that a leader should not own any business or sublet his house. Thus Some statements related to feelings and emotions, others to hopes and wishes, hates (not subletting property) and fears (of consequences of abandoning code). All these statements were based upon or drawn from the leadership code itself. Some sentences were merely paraphrased or expressed in the positive sense as appeared in the code. Others were reflections on the effectiveness of the code so far and

whether it was deemed necessary by the respondents. Hence even though the depth interview stage was skipped, it was felt that the statements expressed accurately what leadership code was all about.

All that remained was to present the object to respondents in order to get their reactions. Sentences were made as short as possible to avoid misunderstanding. Double negatives were avoided. Double-barrelled statements were excluded for fear of problems of understanding them and interpretation.

It was not possible to hide the true motive of the statements or study, as Oppenheim has suggested. Hence all of them were very clear and unambiguous since it was feared hiding the purpose of the statements could produce unwanted responses as the subject could be misunderstood. It in fact turned out that some respondents were not clear of what leadership was all about though they may have heard about it. Hence there was first a need to explain what it was. Thus the purpose of the inquiry had to become obvious: their views on leadership code.

SA2.9.6 PRINCIPLES OF MEASUREMENT IN CONSTRUCTING AND EVALUATING AN ATTITUDE SCALE

The fifteen statements were then scaled in order to end up with fewer statistically appropriate statements. The principles required in constructing and evaluating an attitude scale, or any measurement tool for that matter, were (Oppenheim,1966: 121-122):

1). Unidimensionability or homogeneity. This meant that the scale had to measure one thing at a time, as purely as possible.

2). Linearity and equal intervals or equal-appearing intervals. This implied that the scale had to follow the straight-line model and that some sort of scoring system had to be devised preferably based on interchangeable units. Attitude scales assume the straight line model (though as seen above may not necessarily reflect the true attitude), but the creation of scoring units is difficult and it has been accepted that they are at best, of doubtful interchangeability.

3). Reliability. This is the indispensable attribute of consistency. A measure is said to be consistent if it can produce near-identical results if it were applied to the object at two different intervals. Attitude scales are said to be more reliable than single statements because of their greater length and diversity (Oppenheim, 1966: 73 & 122). It is however accepted that complete consistency is difficult to achieve when dealing with people since they are bound to react differently when confronted by a scale the second time (Oppenheim, 1966: 122). Reasons can be change in attention and effort. Over longer periods, further shifts in score may be due to physical growth, learning, changes in health and personality (Cronbach, 1960: 126-127). For more discussion on reliability see Cronbach, pp 126-142. Oppenheim however states that reliability coefficients of .80 or higher are quite common.

4). Validity. This indicates whether a scale measures what it is supposed to measure. It is argued that unidimensionality may easily be achieved by keeping only items which intercorrelate highly, yet the scale may not measure what the researcher wants it to measure. However, "at present,

there is no way of making sure that an attitude scale is valid" (Oppenheim, 1966: 122). Attempts have however been made to use experts' judgements, memberships in groups with known policies or interests, interviews and case studies, judgements by friends or co-workers, self-ratings, political votes and such overt behaviour as church attendance. New scales are correlated with older, well-known scales though they may themselves be of questionable validity (Oppenheim, 1966: 151-152). For further discussion of relationship between reliability and validity refer to Cronbach, 1960:132.

5). Reproducibility. This requirement enables a researcher to place a respondent with a certain single score on an attitude continuum. That is by knowing a respondent's score, it is possible to know which statements a respondent agreed with and which he disagreed with.

5A2.9.7 SELECTED ATTITUDE SCALING METHOD - LIKERT SCALE

There is no single scaling method that combines the advantages of the five principles discussed in the previous section to the same degree. But Likert scale was selected since "Likert scale [is] the most relevant... to study attitude-patterning or explore theories of attitudes..." (Oppenheim, 1966: 123). Guttman's method is preferable when studying attitude change or the hierarchical structure of an attitude. He was concerned with the twin problems of unidimensionality and reproducibility (Oppenheim, 1966: 143). It enables a researcher to determine from a respondent's score, which items he had

endorsed with not more than 10 percent for the sample as a whole. Thurstone was concerned with group differences. His scale was preoccupied with the problem of equal or rather, equal-appearing intervals. (Oppenheim, 1966: 125).

Likert's main concern was unidimensionality - making sure that all the items would measure the same thing. It was chosen because it does not need the use of judges as is the case with Thurstone. Use of judges would not have been possible in postal questionnaires and with businessmen. With Likert scale, samples place themselves on an attitude continuum for each statement running from "strongly agree" to "agree", through "uncertain," "disagree" "and strongly disagree". Further, Likert scales have been found to correlate well with Thustone scales (oppenheim, 1966: 133). Guttman's scalogram was avoided because it is not usually possible to know before hand whether a group of items will scale i.e. reach a cross-over point (Oppenheim, 1966: 144-145). It is also criticized for a tendency to produce scales covering a very narrow universe of content (because wider areas often do not scale).

5A2.9.7.1. PROCEDURE USED IN CONSTRUCTING LIKERT SCALE

Six steps were required in constructing the Likert scale. The first step was to compose an item pool of 15 statements. Most of the items were either favourable or unfavourable to leadership code. Second, a sample of 50 students and another sample of 50 graduates were selected on whom to test the statements. They were asked to tick the appropriate column of one of the five positions of either "strongly agree," "not sure", "disagree", or "strongly

disagree". These five positions were given simple weights of 5, 4, 3, 2 and 1 for "strongly agree" up to "strongly disagree" respectively.

The third step called for scoring the record of each of the respondents. From above, it is clear that a high scale score of 5 for strongly agree meant a favourable attitude to leadership code. In other words favourable statements were scored 5 for strongly agree down to 1 for "strongly disagree". Likewise, unfavourable statements were scored 1 for "strongly agree" up to 5 for "strongly disagree."

The fourth step, having scored each item, was summing up item scores to obtain a total attitude score for each of the respondents. Since there were 15 statements, the minimum score for each respondent had to be 15 and a maximum of 75 since the minimum item score was 1 and maximum item score was 5.

The fifth step required interval consistency of item-analysis. It is called interval because ideally, item analysis should demand for correlating each item or statement with some reliable outside criterion of the attitude that it is supposed to measure and then retain only those items with highest correlations. "Such external criteria are, however, almost never available" (Oppenheim, 1966: 138). The best available measure of the attitude concerned, was therefore the total item pool. The required act of faith is that by purifying the item pool "The items will at least be consistent and homogeneous - they will all be measuring the same thing - and the scale may possibly also be valid (Oppenheim, 1966:138).

The procedure required in accomplishing this was to find correlation coefficients for each item with the total score and retained those items with the highest correlation. The only minor practical snag was that instead of correlating with the total score, the correlation of each item was with the total score less the score for the item in question. This therefore meant that for each item in turn, there was a slightly different set of total scores to correlate with. Pearson correlation, using equation 5A2.3 was adopted for each of the items and the relevant total scores.

The final list of items was 10. One of these, which was "leadership code is faithfully practised " was retained even though it did not correlate highly since almost all respondents agreed. It was kept because it was found interesting to note that most respondents did not believe that leadership code was faithfully practised, by Zambian leaders. It was planned to use chi-squire in analysing it.

The sixth and final step was merely to administer the 10 statements to the final respondents of students and graduates. Likert scale is said to have a very high reliability as high as 0.85 (Oppenheim, 1966: 140).

Likert scale's major limitation was its lack of reproducibility (in the technical sense). This meant that the same total score for a respondent could be obtained in many different ways. The criticism is that two identical scores may have totally different meanings. It is therefore argued that the pattern of responses becomes more interesting than the total score.

It was for purposes of counterbalancing this criticism that it was decided to look at the pattern of responses using chi-square. It was also decided to look at which items were highly endorsed by using factor analysis. Another criticism has been that the scale offers no metric or interval measures, and it lacks a neutral point. It is pointed out that it is difficult to know where scores in the middle ranges change from mildly positive to mildly negative. Neutral point is difficult to get or interpret. But to obtain splits of responses, percentiles and standard deviations were used in the analysis. This was intended to offset the weakness of lack of neutral point. With quartile analysis, it is for example possible to determine the score made by 25%, 50% or 75% of the respondents.

Factor analysis, the subject of Appendix 9A was therefore also used in analysing attitudes towards leadership code, as just stated above. It can be used to further eliminate items that do not belong and to keep items that have high "leadership" on the factor (attitude) that is being measured (Oppenheim, 966: 142). Factor analysis is also useful in showing how a seemingly unified attitude complex in fact "breaks up" into several independent factors. This was found to be attractive for this study where no *'prior'* knowledge about attitudes towards leadership code was available. As stated above, it was also used to determine which statements were highly endorsed.

SA2.10 CONTENT ANALYSIS

Content analysis is not '[4per se' a statistical technique since it is based on textual data which cannot be used directly for quantitative analysis. Content analysis involved reading through all the answers to open ended questions and invitations for comments so that occurrences of particular ideas were traced and carefully pieced together (Howard, 1983: 102). These occurrences of ideas then formed the basis for statistical analysis after they were transformed into categorical variables by counting the number of occurrences of the same ideas. This process was used for student's and graduate's questionnaires particularly on the section dealing with SBIS degree and for all the three main questionnaires on leadership code. The second major way in which textual data was used was making quotations in addition to tracing the main ideas. This was the major method adopted for analysing the fourth questionnaire - Small business supporting agencies as it was found to be the most appropriate for answers to open ended questions.

CHAPTER 5 APPENDIX 3 - METHODOLOGY: STATISTICAL DATA ANALYSIS APPROACHES - MULTIVARIATE ANALYSIS: FACTOR ANALYSIS

5A3.1 INTRODUCTION

Chapter 5 appendix 3 discusses factor analysis statistical technique which was found to be the most appropriate for analysing factors that influence students and graduates in selecting to work in small or large organisations. The same was true for identifying the the underlying deeper attitudes towards the leadership code as well as knowing the manner in which the items were endorsed by students, graduates and businessmen. There were six goals in this appendix.

1. To justify the need for using factor analysis in this research study.

2. To briefly review the basic underlying concepts in factor analysis-matrices.

3. To explain how to identify constructs or factors that explain the correlations among a set of variables

4. To show how to test hypotheses about the structure of variables i.e. determine the appropriateness of the factor analysis model.

5. To show how to summarize a large number of variables with a smaller number of "derived" variables

6. To discuss how to determine the number of dimensions required to represent a set of variables.

Factor analysis is a multivariate statistical technique which is used to identify a relatively small number of factors that can be applied to represent relationships among sets of many interrelated variables (Norusis, 1985: 125-126 and Ehrenberg, 1981: 267).

The basic assumption of factor analysis is that underlying dimensions, or factors can be used to explain a complex phenomena. It is further assumed that observed correlations between variables result from their sharing of these common factors. The ultimate goal of factor analysis then is to identify the not-directly-observable factors based on a set of observable variables. Factor analysis does not make any distinction between dependent and independent variables in the process of identifying these underlying dimensions. The basic tool for analysis is a correlation matrix based on a variance and convariance matrix which is built for the variables of interest (SPSS Inc., 1986: 715).

Factor analysis therefore is a branch of multivariate statistical data analysis techniques. Univariate analysis discussed earlier in chapter 5 appendix 2 (5A2) is concerned with analysing variation in a single random variable. This is true even in the case of multiple regression because it tries to account for variation in one dependent variable. But multivariate analysis considers "several related random variables simultaneously, each one being considered equally important at the start of the analysis" (Manly, 1986: 1). Factor analysis then attempts to account for the variation in a number of original variables using a small number of index variables or factors. It

is assumed that each one of the original variables can be expressed as a linear combination of these factors, plus a residual term which show the extent to which the variable under investigation is independent of all the other variables (Manly,1986: 1; Ehrenberg, 1981: 263 & 265).

5A3.1.1 JUSTIFICATION FOR SELECTING FACTOR ANALYSIS

Factor analysis was determined to be suitable in analysing influencing and discouraging factors for students and graduates in selecting to work in large or small Firms. The reasoning was that since this section dealt with 21 items, for each sample or 42 items in total, this would have required many chi-square tests, a minimum of 42 chi-square tests. Testing all these in order to find an overall conclusion would have been difficult. Adopting factor analysis could reduce these to a minimum of two analysis, one for students and the other for graduates. It was however found more beneficial to break the analysis into influencing and dissuading factors to work in small or large businesses for a total of 8 analysis (4 for students and 4 for graduates). Further it was found suitable in identifying a few factors, which would not have been easy with chi-square analysis.

Factor analysis was also found to be suitable on constructing factorial scales in attitudes towards leadership code. Oppenheim (1966:142-143) refers to Cattell (1952) who advocated the use of factor analysis as "a better way of ensuring unidimensionality". Oppenheim says that this statistical technique is based on intercorrelating all items with one another which enables the analyst to extract one or more factors that the

items or some of them have in common. Factor analysis is useful in eliminating items that do not belong to the factor that is being measured and to keep items that have high "loadings "on the factor (attitude).

He also points out that factor analysis is beneficial in showing "how a seemingly unified attitude complex in fact "breaks up" into several independent factors. Therefore in order to find out whether the scale was measuring one thing, eliminate further items that did not belong to the attitude and investigate any further underlying aspects of attitudes on leadership code, it was decided to use factor analysis in addition to Likert scale. It was thought that this would also provide an hierachical order of the manner in which the items were endorsed by providing some "weights" on them.

5A3.1.2 PROCEDURE FOR FACTOR ANALYSIS

As an illustration, given a set of data for students from respondent 1 to respondent 181 as shown in table 5A3.1 for eight variables X_1 to X_8 which may influence a student to work in small business, factor analysis attempts to combine these variables so that a few factors say 3 may explain the major influencing factors. This is a six step process in which factor analysis aims at first computing variances and covariances of a matrix. Second finding a correlation matrix for each of the variables. Third calculating eigenvalues and the corresponding eigenvectors. Fourth, extracting a number of factors necessary to represent the data by discarding any components that account for a small proportion of the variation in the data. This means selecting

components with large eigenvalues. Fifth, rotating the extracted factors using appropriate technique. Sixth naming the final factors by the most meaningful terms. The final result would for example appear as in table 5A3.2. The generalized form is shown in equations 5A3.1 and 5A3.2.

Definition of basic underlying concepts in factor analysis will first be presented, then followed by the factor analysis model where the six steps above will be discussed. Application of factor analysis is dealt with in chapters 8 and 9 which analyse research findings on students' and graduates attitudes towards working in small or large firms and all three respondents attitudes towards leadership code respectively.

Table 5A3.1 The form of raw data scores of the strongly agree- disagree type for Factor analysis

Respondent No.	X_1	X_2	X_3	X_4	X_5	X_6	X_7	X_8
001	3	4	3	2	3	4	4	4
002	4	2	4	3	4	4	4	4
003	4	3	5	4	3	4	5	5
.								
.	5	4	5	3	4	3	5	5
.								
181								

Table 5A3.2 Extracted Factors using Factor Analysis

$$X_1 = a_{11} F_1 + a_{12} F_2 + a_{13} F_3 + e_1$$
$$X_2 = a_{21} F_1 + a_{22} F_2 + a_{23} F_3 + e_2$$
$$X_3 = a_{31} F_1 + a_{32} F_2 + a_{33} F_3 + e_3$$

$$X_4 = a_{41} F_1 + a_{42} F_2 + a_{43} F_3 + e_4$$
$$X_5 = a_{51} F_1 + a_{52} F_2 + a_{53} F_3 + e_5$$

and $X_6 = a_{61} F_1 + a_{62} F_2 + a_{63} F_3 + e_6$

$$X_7 = a_{71} F_1 + a_{72} F_2 + a_{73} F_3 + e_7$$
$$X_8 = a_{81} F_1 + a_{82} F_2 + a_{83} F_3 + e_8$$

where:

x_1 to x_8 = variables 1 to 8 influencing students to work in small businesses.

a_{ij} = constant value

F_1 = Factor 1

F_2 = Factor 2

F_3 = Factor 3

e_1 = Residual representing the variation in x_i that is independent of the variation in the other $\bar{X}$ variables, i.e. that is accounted for by the factor.

Source: constructed using information from Manly, p.77 equation 6.2

Thus given variables X_1 to x_i, the generalised factor model is as given in equation 5A3.1

Equation 5A3.1 Generalised Factor model.

$$X_1 = a_{11} F_1 + a_{12} F_2 + \ldots + a_{1m} F_m + e_1$$
$$X_2 = a_{21} F_1 + a_{22} F_2 + \ldots + a_{2m} F_m + e_2$$
$$X_p = a_{p1} F_1 + a_{p2} F_2 + \ldots + a_{pm} F_m + e_p$$

In short for this becomes :

Equation 5A3.2 generalised Factor model.

$$X_i = A_{i1} F_1 + a_{i2} F_2 + \ldots + a_{im} F_m + e_i$$

where

x_i = variables

a_{im} = constant factor loadings

$F_1 F_o F_m$ = Factors

e_i = residue

Source: Manly, p.77 equation 6.2 and p.73

Foot Notes

[1] Kretch Davise, Crutchfield Richards D. and Ballachey Egerton L, Individual in society (New York: McGraw-Hill, 1962). See chap.5 "The Nature and measurement of attitudes," for the characteristics of attitudes and attitude systems, an exposition of scalling methods and types of survey questions.

[2] Katz D and Stotland E., "A preliminary statement to a theory of attitude structure and change", in S. Koch, ed., psychology: A study of a science, vol.3: Formulations of the person and the social context (New York: Mograw-Hill, 1959).

[3] Suchman Edward A. "The intensity component in attitude and opinion Research" in Samuel A. Stouffer, ed., (1950) measurement and prediction (Princeton, N.J. Princeton university Press, 1950)

5A3.2 DEFINITION OF BASIC UNDERLYING CONCEPTS IN FACTOR ANALYSIS; MATRICES AND VECTORS

It is apparent form the introduction that factor analysis is based on matrices and vectors. It is therefore essential to present a brief description of the terminologies used and the operations on matrices in order to adequately explain the underlying theory in factor analysis and particularly the computations of the matrix inversion, eigenvalues and vectors, the sample covariance matrix (sample dispersion matrix) and sample correlation matrix.

5A3.2.1. DEFINITION OF MATRICES AND VECTORS

A matrix of size m x n is an array of numbers with m rows and n columns, which is regarded as a single entity, of the form (Manly, 1986: 17-25)[1]

Equation 5A3.3 definition of a Matrix

$$\mathbf{A} = \begin{bmatrix} a_{11} & a_{12} & \cdots & a_{1n} \\ a_{21} & a_{22} & \cdots & a_{2n} \\ \vdots & \vdots & & \\ a_{m1} & a_{m2} & \cdots & a_{mn} \end{bmatrix}$$

If m = n, then this is a *square* matrix. If a matrix has one column only as below, then this is called a *column vector*

Equation 5A3.4 a column vector

$$\mathbf{c} = \begin{bmatrix} c_1 \\ c_2 \\ \vdots \\ c_m \end{bmatrix}$$

If there is only one row, then that is referred to as a *row vector* as:

Equation 5A3.5 a row vector

$$r = (r_1, r_2, \ldots, r_n).$$

The transpose of a matrix is found by interchanging the rows and columns. That is the first row of a matrix becomes the first column of its transpose. Thus the transpose of matrix A above is:

Equation 5A3.6 the the transpose of a matrix

$$A' = \begin{bmatrix} a_{11} & a_{21} & \cdots & a_{m1} \\ a_{12} & a_{22} & \cdots & a_{m2} \\ \vdots & \vdots & & \\ a_{1n} & a_{2n} & \cdots & a_{mn} \end{bmatrix}$$

It follows that the transpose of a column vector is a row vector and the transpose of row vector is a column vector as:

Equation 5A3.7 and 5A3.7: Transpose of a column and a row vector.

Transpose of a column vector:

$$c' = (c_1, c_2, \ldots, c_m)$$

Transpose of a row vector:

$$\text{and } r' = \begin{bmatrix} r_1 \\ r_2 \\ \vdots \\ r_n \end{bmatrix}$$

Some kinds of matrix are of special importance. A *zero matrix* has all its elements equal to zero. A *diagonal* matrix is a square matrix that has elements of zero, except down the main diagonal, reading form left to right. A *symmetric matrix*

is a square matrix that remains unchanged when it is transposed, so that A has this property providing that A' = A. This is the most important matrix in Factor analysis. Lastly, an *identity matrix* is a diagonal matrix with all diagonal terms being unity.

Equations 5A3.11 to 5A3.11 zero, diagonal and identity matrices.

$$0 = \begin{bmatrix} 0 & 0 & \dots & 0 \\ 0 & 0 & \dots & 0 \\ \vdots & & & \\ 0 & 0 & \dots & 0 \end{bmatrix} \qquad T = \begin{bmatrix} t_1 & 0 & 0 & \dots & 0 \\ 0 & t_2 & 0 & \dots & 0 \\ 0 & 0 & t_3 & \dots & 0 \\ \vdots & & & & \\ 0 & 0 & 0 & & t_n \end{bmatrix} \qquad T = \begin{bmatrix} 1 & 0 & 0 & \dots & 0 \\ 0 & 1 & 0 & \dots & 0 \\ 0 & 0 & 1 & \dots & 0 \\ \vdots & \vdots & \vdots & & \\ 0 & 0 & 0 & \dots & 1 \end{bmatrix}$$

Source: Manly,1986 p.18

Two matrices are <u>equal</u> if and only if all their corresponding elements agree. Thus given matrices A and B, A = B If $a_{11} = b_{11}$, $a_{12} = b_{12}$,- - - -, $a_{33} = b_{33}$.

Equation 5A3.12 equality of matrices

$$A = B = \begin{bmatrix} (a_{11}) & (a_{12}) & a_{13} \\ a_{21} & a_{22} & a_{33} \\ a_{31} & a_{32} & (a_{33}) \end{bmatrix} = \begin{bmatrix} (b_{11}) & (b_{12}) & b_{13} \\ b_{21} & b_{22} & b_{33} \\ b_{31} & b_{32} & (b_{33}) \end{bmatrix}$$

$a_{12} = b_{12}$, $a_{11} = b_{11}$, $a_{33} = b_{33}$

The trace of a matrix refers to the sum of the diagonal terms, defined only for square matrices. Thus

$tr(A) = a_{11} + a_{22} + \text{---} + a_{nn}$ for an n x n matrix.

Orthogonal matrices are those for which the inverse is equal to the transpose. Thus A is orthogonal if $A^{-1} = A'$. Matrix inversion is similar to the ordinary arithmetic process of division. Inverse matrices are only defined for square matrices. But all matrices do not have an inverse. Given a scalar k, it is true that $k \times k^{-1} = 1$. Likewise, if A is a square matrix, then its inverse is A^{-1} where $A \times A' = I$, this being an identity matrix, seen above. A scalar is an ordinary number such as 20. For an overview of matrix inversion see chapter 5 appendix 5A4. Refer to appendix 5A4.1 for an overview of operations on matrices i.e. addition, subtraction, division and multiplication. This section also presents a brief discussion of multiplication by a scalar.

Eigenvalues, means and covariances of matrices are next defined before discussing the factor analysis model in section 5A3.3

5A3.2.2 EXPLANATION OF EIGENVALUES IN RELATION TO VECTORS

Mathematicians have shown that given certain equations as shown below, they are true only for certain values of the scalar λ that are called the *latent roots* or *eigenvalues* of the

matrix A. There can be up to *n* of these roots (manly, 1976: 22):

Equation 5A3.13 Eigenvalues and vectors

$$a_{11}x_1 + a_{12}x_2 + \dots + a_{1n}x_n = \lambda x_1$$

$$a_{21}x_1 + a_{22}x_2 + \dots + a_{2n}x_n = \lambda x_2$$

$$\vdots$$

$$a_{n1}x_1 + a_{n2}x_2 + \dots + a_{nn}x_n = \lambda x_n$$

The equations above can be expressed in a different form as:

$$AX = \lambda X \quad \text{or} \quad (A - \lambda I)\, X = 0$$

where :

I = n X n identity matrix

0 = n X 1 zero vector.

Thus given the jth latent root λi the equations can be solved by arbitrarily setting $x_i = 1$. The result is a vector of x values

$$X_i = \begin{bmatrix} 1 \\ x_{2i} \\ x_{3i} \\ \vdots \\ x_{ni} \end{bmatrix}$$

or any multiple of it which is called the ith latent vector or the jth eigenvector of the matrix A. The sum of the eigenvalues of A is simply the trace of A. However finding individual eigenvalues and eigenvectors is a complex matter, like finding a matrix inverse for matrices larger than 2 X 2 size, it is best done on a computer.

5A3.2.3 EXPLANATIONS OF VECTORS OF MEANS AND COVARIANCE MATRICES

As seen in chapter 5 appendix 2, in the case of a single random variable (for example, x_1, x_2, ...x_n), the *sample mean* $\bar{x}$, and the *sample estimate of variance*, s^2, are the usual estimates of their population parameters, the *population mean* ,μ and *population variance* δ^2. The sample estimate of the mean is found as (Manly, 1986: 23):

Equation 5A3.14 sample mean

$$\bar{x} = \frac{\sum_{i=1}^{n} x_i}{n}$$

It was also shown earlier in equation 5A2.32 that the sample estimate of variance is found as:

Equation 5A2.32 sample variance

$$s^2 = \frac{\sum_{i-1}^{n} (x_i - \bar{x})^2}{n - 1}$$

Similarly, multivariate populations and samples can be summarized by mean vectors and covariance matrices. If for example it is assumed that there are p variables X_1, X_2,..., X_p and the values of these for the ith individual in a sample are x_{i1}, x_{i2}, ... x_{ip}, respectively, then the sample mean of variable j and variance are found respectively as (Manly, 1986: 23):

Equation 5A3.15 sample mean

$$\text{sample mean} = \frac{\sum_{i=1}^{n} x_{ij}}{n}$$

Equation 5A3.16 sample variance

$$\text{sample variance} \quad s_j^2 = \frac{\sum_{i=1}^{n} (x_{ij} - \bar{x})^2}{n - 1}$$

Further, the sample covariance between variables j and k which measures the extent to which the two variables are linearly related is defined as:

Equation 5A3.17 sample covariance

$$\text{sample covariance} = c_{jk} = \frac{\sum_{i=1}^{n} (x_{ij} - \bar{x}_j)(x_{jk} - \bar{x}_k)}{n - 1}$$

It will be recalled that the sample mean for multivariate populations in equation 5A3.15 was presented earlier in a simplified form when dealing with grand mean in ANOVA as equation 5A2.33. In that case, all the three means were summed up and then divided by the total size of the three samples. Similarly, the sample variance of multivariate populations in equation 5A3.16 was referred to as the between column variance or first estimate of the population variance in ANOVA.

The ordinary correlation coefficient discussed earlier in appendix 5A2.3.1.4. can be extended to multivariate analysis where several variables are involved. The correlation coefficient for variables j and k, which is r_{jk}, is related to the covariance in equation 5A3.17 by the expression (Manly, 1986: 23):

Equation 5A3.18 sample correlation coefficient

$$\text{sample correlation coefficient} = r_{jk} = \frac{c_{jk}}{s_j \, s_k}$$

where

c_{jk} = sample coefficient correlation

s_j = sample standard deviation for variable j

s_k = sample standard deviation for variable k

It can be seen from above that $c_{kj} = c_{jk}$, = r_{jk} and $r_{kk} = 1$, just like the ordinary correlation.

When calculating the grand mean from several variables, the concepts are the same as those shown in chapter appendix 2 (5A2) in ANOVA. But the appropriate formula is equation 5A3.15, *'vide supra'*. The grand mean may be regarded as the centre of the sample. It is expressed as a *vector of sample means*, *'vide infra'* (Manly, 1986: 24)

Equation 5A3.19 vector of sample means

$$\text{vector of sample means} = \bar{\mathbf{x}} = \begin{bmatrix} \bar{x}_1 \\ \bar{x}_2 \\ \vdots \\ \bar{x}_p \end{bmatrix}$$

The vector of sample means is an estimate of the *population vector of means*, expressed as:

Equation 5A3.20 Population vector of means

$$\text{population vector of means} = \mu = \begin{bmatrix} \mu_1 \\ \mu_2 \\ \vdots \\ \mu_p \end{bmatrix}$$

The matrix of variances and covariances where $c_{ii} = s_i^2$ is called the ***sample covariance matrix*** or sometimes as the sample dispersion matrix. It reflects the amount of variation in the entire sample and also the extent to which the p variables are correlated just as it was explained for two random variables. It is an estimate of the population covariance matrix. It is calculated using equation 5A3.17 and expressed as (Manly, 1986: 24):

Equation 5A3.21 Matrix of variance and covariances

$$C = \begin{bmatrix} c_{11} & c_{12} & \cdots & c_{1p} \\ c_{21} & c_{22} & \cdots & c_{2p} \\ \vdots & & & \\ c_{p1} & c_{p2} & & c_{pp} \end{bmatrix}$$

The matrix of correlations, the ***sample correlation matrix,*** as defined by equation 5A3.18, which like C must be symmetric, and is written as:

Equation 5A3.22 The sample correlation matrix

$$R = \begin{bmatrix} r_{11} & r_{12} & \cdots & r_{1p} \\ r_{21} & r_{22} & \cdots & r_{2p} \\ \vdots & & & \\ r_{p1} & r_{p2} & & r_{pp} \end{bmatrix} = \begin{bmatrix} 1 & r_{12} & \cdots & r_{1p} \\ r_{21} & 1 & \cdots & r_{2p} \\ \vdots & & & \\ r_{p1} & r_{p2} & & 1 \end{bmatrix}$$

5A3.3 THE FACTOR ANALYSIS MODEL

It is now time to return to a detailed discussion of the factor analysis model (including types of factors) and the procedure applied when dealing with factor analysis. It was pointed out in the introduction that the basic aim of factor analysis is to find the possibility of describing a set of p variables $X_1, X_2, \ldots, X_p$ in terms of a smaller number of indices or factors, and hence highlight the relationship between these variables. This means grouping variables in such a way that items as a group correlate highly with one another, and which as a group are distinct from (i.e. have low correlations with) variables that do not belong to the group (Vernon, 1956: 1-24 in Cronbach, 1960: 248).

5A3.3.1. THE THEORY OF FACTOR ANALYSIS

5A3.3.1.1 ORIGIN OF THE FACTOR ANALYSIS MODEL

Factor analysis owes its existence to its early development by Charles Spearman. Studying the correlations between test scores of various types led him to conclude that many observed correlations could be accounted for by a simple model for the scores (Manly, 1986: 72). Manly for example presented one case in which Spearman had obtained the following matrix of correlations for boys in a preparatory school for their scores on tests in classics(C), French (F), English (E), Mathematics (M), Discrimination of pitch (D) and Music (Mu):-

Table 5A3.3 proportionality of any two rows

	C	F	E	M	D	Mn
C	1.00	0.83	0.78	0.70	0.66	0.63
F	0.83	1.00	0.67	0.67	0.65	0.57
E	0.78	0.67	1.00	0.64	0.54	0.51
M	0.70	0.67	0.64	1.00	0.45	0.51
D	0.66	0.65	0.54	0.45	1.00	0.40
Mn	0.63	0.57	0.51	0.51	0.40	1.00

Source: Manly, 1986 P.72

One feature he had noted was that the matrix had the interesting property that any two rows were almost proportional if the diagonals were ignored. Thus for rows C and E there were these ratios:

$$\frac{0.83}{0.67} \approx \frac{0.70}{0.64} \approx \frac{0.66}{0.54} \approx \frac{0.63}{0.51} \approx 1.2$$

Spearman then proposed a model that the six test scores were all of the form

$$x_i = a_i F + e_i,$$

where

X_i = the ith standardized score with a mean of zero and a standard deviation of one,

a_i = constant

F = factor value which has a mean of zero and standard deviation of one for individuals as a whole

e_i = part of X_i that is specific to the ith test only

Source: Manly, 1986 p.73

He had shown that a constant ratio between rows of a correlation matrix followed as a consequence of the above assumptions and that therefore this was a "plausible model for the data" (Manly, 1986: 73.

In addition to the constant correlation it also followed that the variance of X_i was given by the following equation since a_i is a constant, F and e_i are independent and the variance of F is assumed to be unity:

$$\begin{aligned} Var(X_i) &= var(a_iF + e_i) \\ &= var(a_iF) + var\ (e_i) \\ &= a_i^2 var(F) + var\ (e_i) \\ &= a_i^2 + var\ e_i) \end{aligned}$$

But since (X_i) is also unity the last equation can be written as:

$$1 = a_i^2 = var\ (e_i)$$

Therefore the constant a_i, which is called the *factor loading*, is such that its square is the proportion of the variance of X_i that is accounted for by the factor.

5A3.3.1.2 GENERALISATION OF THE FACTOR MODEL

This work was the basis of Spearman's two-factor theory of mental tests: each test result is made up of two parts, one that is common to all tests ('general intelligence'), and another that is specific to the test. Further development of the theory, allowing for each test result to consist of a part due to several common factors plus a part specific to the test led to the

present factor analysis model as it is known today. This gives the general factor analysis model, presented earlier in equation 5A3.2 which was:

Equation 5A3.2 Generalized factor analysis model

$$X_i = a_{i1}F_1 + a_{i2}F_2 + \ldots + a_{im}F_m + e_i$$

where:

X_i = the ith test score with mean zero and unit variance

$a_{i1}, a_{i2}, \ldots a_{im}$ = the *factor loadings* for the ith test;

F_1, F_2, F_m = uncorrelated *common factors*, each with mean zero and unit variance;

e_i = a factor specific only to the ith test, which is uncorrelated with any of the common factors and has mean zero.

With the generalized model, the variance can be determined as:

Equation 5A3.23 variance of generalized factor analysis model

$$\text{var}(X_i) = 1 = a_{i1}^2\text{ar}(F_1) + a_{i2}^2\text{var}(F_2) + \ldots + a_{im}^2\text{var}(F_m) = \text{var}(e_i)$$
$$= a_{i1}^2 + a_{i2}^2 + \ldots + a_{im}^2 + \text{var}(e_i)$$

where

$a_{i1}^2 + a_{i2}^2 + \ldots a_{im}^2$ = the *communality* of X_i (the part of its variance that is related to to the common factors)

e_i = *specificity* of X_i (the part of its variance that is unrelated to the common factors).

Further the correlation between X_i and X_j is

Equation 5A3.24 correlation between two variables- a generalized factor analysis model.

$$r_{ij} = a_{i1}\,a_{j1} + a_{i2}\,a_{j2} + \ldots + a_{im}\,a_{jm}$$

Therefore two test scores can only be highly correlated if they have high loadings on the same factors. Furthermore, $-1 \leq a_{ij} \leq +1$ since the communality cannot exceed one. The communality or overlapping factor is found by squaring the correlation of two variables. Taking away the communality plus the variance (due to error) from one leaves the specificity, which is due to some distinct quality of variable X_i not common to X_j as was discussed in the section dealing with correlation analysis. Thus in general, high correlation indicates that the variables possess a common element. If all the variables have substantial relation to each other, they must be influenced by the same common factor or characteristic. This happens when correlations are generally positive. If on the other hand variables have very small intercorrelations, the variables must have very little in common and therefore represent different groupings or factors. For a more detailed discussion of relationships between variables, see Cronbach, 1960: 248-9.

5AS.3.1.3 THE THREE GROUPS OF FACTORS

To conclude this section, it should be noted that factors can therefore be classified into three main groups: the general, group and specific (Cronbach, 1960: 250). A specific factor is present in one variable but not in any of the others under study. A group factor is present in more than one variable. A general factor is one that is found in all the variables. If all the correlations among a set of tests or variables are positive, one can find a general factor. But if there are any zero or negative correlations, a general factor will ordinarily not be found (see figure 5AS.1). The aim of factor analysis is to determine a table

(vector) of "factor loadings". The factor loadings are computed from the correlation between each variable and each factor. The contribution of each factor to the variance of each variable X_i is found by squaring the factor loading of each variable X_i. The total of all the factor loadings should equal to the sum of the scalar i.e. the number of variables being considered since the combination of each of the variables and each of the factors should equal to 1.

Fig. 5A3.1 Possible Factorial Relations among variables

Possible correlations among three variables

a)

	x_1	x_2	x_3
x_1		.0	.0
x_2			.0
x_3			

b)

	x_1	x_2	x_3
x_1		.7	.7
x_2			.7
x_3			

c)

	x_1	x_2	x^3
x_1		.5	.0
x_2			.0
x_3			

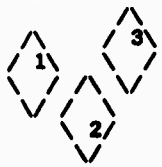
d)

	x_1	x_2	x_3
x_1		.6	.6
x_2			.4
x_3			

Corresponding factor patterns

(general factor heavily shaded; group factor lightly shaded)

a)



All factors specific

b)

General and specific factors

c)

Group and specific factors

d)

General, Group and specific factors

Source: Adapted from Cronbach, 1960: 251

Footnote[1] most of the work in this section was adapted from Manly, 1986.

SAS.3.2 PROCEDURE USED IN FACTOR ANALYSIS

Application of the six step procedure of factor analysis given in the introduction is fully described in chapters 6.2 and 9.2 which deal with analysis of results for factors which influence students and graduates to work in small or large businesses and leadership code respectively. However in order to provide a background understanding of the underlying principles and concepts used, the main features of the process will now be fully explained. Principal component analysis was preferred in determining the initial provision factor loadings a_{ij}, and in using principal components as the initial factors. Therefore the three main steps of principal component analysis were the same as the first three steps of factor analysis (i.e. up to the extraction of the most important or principal unrotated components). In fact a principal component analysis just involves finding the eigenvalues of the sample covariance matrix. The eigenvalue for a principal component indicates the variance that it accounts for out of the total variance (i.e. the sum of the diagonal unitary values of the correlation matrix or the total number of variables).

5A3.3.2.1 **COMPUTATION OF THE COVARIANCE MATRIX**

The first step then was the computation of sample variance and covariance matrix as described earlier. The important equations were 5A3.18, 5A3.17 and 5A3.21 (for calculating the sample variance, sample covariance and covariance matrix respectively). The matrix is symmetric (square matrix that is unchanged when transposed) of the form given in equation 5A3.21 as:

Equation 5A3.21 Matrix of variances and covariances

$$C = \begin{bmatrix} c_{11} & c_{12} & \cdots & c_{1p} \\ c_{21} & c_{22} & \cdots & c_{2p} \\ \vdots & & & \\ c_{p1} & c_{p3} & & c_{pp} \end{bmatrix}$$

where the diagonal element c_{ii} is the variance of x_i and

c_{ij} = the convariance of variables X_i and X_j.

5A3.3.2.2 FINDING THE CORRELATION MATRIX AND TESTING THE FACTOR MODEL

5A3.3.2.2.1 FINDING THE CORRELATION MATRIX

The second step demands finding a correlation matrix. The relevant correlation matrix, presented earlier as equation 5A3.22, was:

Equation 5A3.22 Correlation matrix

$$R = \begin{bmatrix} 1 & \sigma_{12} & \cdots & \sigma_{1p} \\ \sigma_{21} & 1 & \cdots & \sigma_{2p} \\ \vdots & & & \\ \sigma_{p1} & \sigma_{p2} & & 1 \end{bmatrix}$$

where $\sigma_{ij} = \sigma_{ji}$ is the correlation between x_i and x_j. This then means that principal component analysis is carried out on the correlation matrix.

5A3.3.2.2.2 Testing the Appropriateness of the Factor Model

At this point, after computing the correlation matrix it was found pertinent to examine the correlation matrix in order to find out whether variables were related to one another for the factor model to be appropriate. The argument is that since one of the goals of factor analysis is to obtain "factors" that help in explaining correlations, if these correlations between variables are small, then it is unlikely that they share common factors. The results are shown in chapters 6 and 9 which discuss research results analysis.

Apart from visual examination, formal tests were carried out on the data to determine the appropriateness of using the factor model. Bartlett's test of sphericity was used to test the hypothesis that the correlation matrix was an identity matrix. That is, all diagonal terms are 1 and all off-diagonal terms are 0. This test requires that the data be a sample from a multivariate normal population. In order to use the factor analysis model, the hypothesis that the population correlation matrix is an identity should be rejected or else another method should be considered for use. To reject the hypothesis, the test statistic for sphericity (based on a chi-square transformation of the determinant of the correlation matrix) should be large and the associated significance level should be small (Norusis, 1985: 128).

To test the strength of the relationship among variables, the recommended anti-image correlation was used (Norusis, 1985: 128-9). If the proportion of large coefficients is high, that is if there are too many big coefficients in the matrix of anti-image correlations, it is then recommended to reconsider the use of the factor model. The anti-image correlation is the negative of the partial correlation coefficient, which measures the strength of the relationship among variables. The test is based upon the statistical concept that if the variables share common factors, then the partial correlation coefficients between pairs of variables should be small when the linear effects of the other variables are eliminated. This should be so because partial correlations are estimates of the correlations between the unique factors and should be close to zero when the factor analysis

assumptions are met. If it is recalled that unique factors are assumed to be uncorrelated with each other, it will be seen why this is true.

The third test of suitability of the factor model used was the Kaiser-Meyer-Olkin (K M O) measure of sampling adequacy. It is an index for comparing the magnitudes of the observed correlation coefficients to the magnitudes of the partial correlation coefficients. It is computed as (Norusis, 1985:129):

Equation 5A3.25 Kaiser-meyer-olkin overall test of sampling adequacy

$$K\ M\ O = \frac{\sum_{i \neq j} r_{ij}^2}{\sum_{i \neq j} r_{ij.}^2 + \sum_{i \neq j} a_{ij}^2}$$

where

r_{ij} = simple correlation coefficient between variables i and j.

a_{ij} = partial correlation coefficient between variables i and j.

If the sum of the squared partial correlation coefficients between all pairs of variables is small when compared to the sum of the squared correlation coefficients, the K M O measure is close to 1. The nearer to 1 the test statistic is, the more appropriate the use of the factor model is. Small values for the K M O measure then indicate that the model should not be used, since correlations between pairs of variables cannot be explained by the other variables. Kaiser 1974 quoted in Norusis (1985:129) classifies measures in the 0.90's as

marvellous, in the 0.80's as meritorious, in the 0.70's as middling, in the 0.60's as mediocre, in the 0.50's as miserable, and below 0.5 as unacceptable.

In addition to computing an overall sampling adequacy, the index was also computed for each of the individual variable. But instead of including all pairs of variables in the summations only coefficients relating to that variable were included in the modified formula. For example for the ith variable, the measure of sampling adequacy was (Norusis,1985:130):

Equation 5A3.26 Factor analysis measure of sampling adequacy for individual variables.

$$MSA = \frac{\sum_{j \neq i} r_{ij}^2}{\sum_{j \neq i} r_{ij}^2 + \sum_{j \neq i} a_{ij}^2}$$

These measures of sampling adequacy for individual variables are printed on the diagonals of the anti-image correlation matrix in chapter 6 (table 6.2) which deals with research results for students and graduates attitudes towards working in small and large firms and chapter 9 which analyses all respondents attitudes towards leadership code.

5A3.3.2.3 COMPUTING EIGENVALUES AND EIGENVECTORS

The third step was finding eigenvalues $\lambda_1, \lambda_2, \ldots, \lambda_p$ and the corresponding eigenvectors $a_1, a_2, \ldots, a_p$. The coefficients of the ith principal components are then given by a_i while λ_i is its variance. Thus variances of the principal components are the eigenvalues of the matrix C. There are p of these, some of which may be zero, but no negative eigenvalues. The underlying equations in calculating the eigenevalues are based on assumption that each of the principal components can be expressed as a linear combination of the variables $x_1, x_2, \ldots x_p$ (as discussed in the introduction). Thus the first three components were for example given, in general form, as:

Equation 5A3.27 Computation of eigenvalues

$$\left.\begin{aligned} z_1 &= a_{11}x_1 + a_{12}x_2 + \ldots + a_{1p}x_p \\ z_2 &= a_{21}x_1 + a_{22}x_2 + \ldots + a_{2p}x_p \\ z_3 &= a_{31}x_1 + a_{22}x_2 + \ldots + a_{1p}x_p \end{aligned}\right\}$$

subject to the condition that

$$a_{11}^2 + a_{12}^2 + \ldots + a_{1p}^2 = 1$$

$$a_{21}^2 + a_{22}^2 + \ldots + a_{2p}^2 = 1$$

$$a_{31}^2 + a_{32}^2 + \ldots + a_{3p}^2 = 1$$

and that z_1 and z_2 were uncorrelated, z_3 was uncorrelated with z_1 and z_2. This process was continued until the number of principal components was equal to the number of variables.

Finding the variances of the principal components resulted in eigenvalues of each of the components. The number of eigenvalues was equal to the number of variables or components.

Thus assuming that the eigenevalues were ordered as

Equation 5A3.28 Decreasing eigenvalues

$$\lambda_1 \geq \lambda_2 \geq \ldots \geq \lambda_p \geq 0, \text{ then } \lambda_i$$

corresponds to the ith principal component

Equation 5A3.29 Decreasing eigenvalues and their relationship to principal component

$$Z_i = a_{i1}x_1 + a_{i2}x_2 + \ldots + a_{ia}x_p$$

In particular, var $(z_i) = \lambda_i$ and the constants, $a_{i1}, a_{i2}, \ldots, a_{ip}$ are the elements of the corresponding eigenvector.

An important property of the eigenvalues for noting is that they add up to the sum of the diagonal elements (the trace as seen earlier) of c. This implies

$$\lambda_2 + \lambda_2 + \ldots + \lambda_p = c_{11} + c_{22} + \ldots + c_{pp}$$

Since c_{ii} is the variance of x_i and λ_i is the variance of z_i, this means that the sum of the variances of the principal components is equal to the sum of the variances of the original variables. It is in this sense it is said that the principal components account for all of the variation in the original data (Manly, 1986:63).

5A3.3.2.4. FACTOR EXTRACTION

The purpose of calculating eigenvalues in the last step was to use the eigenvalues or indices in extracting the number of factors necessary to represent the data by discarding any components that only account for a small proportion of the variation in the data. In other words, the principal components with large indices are preferable. The goal of the factor extraction step then was to determine the factors and the method of calculating them and selecting them.

5A3.3.2.4.1 Selecting The Method for Factor Extraction

Since the chosen method for calculating eigenvalues was principal components analysis, this automatically became the method for determining the factors as was pointed out in the last section. It should however be noted that principal components analysis is, in general, separate from factor analysis. It can be used whenever uncorrelated linear combinations of the observed variables are desired. All it does is transform a set of correlated variables to a set of uncorrelated variables i.e. principal components. Principal components analysis was selected because it is described as on of the "common" methods of extracting "principal components" (Ehrenberg, 1981: 266) and as one of the simplest of the multivariate methods ... " and is "... recommended for an initial 'look' at data." (Manly, 1986: 59 & 83). Other possible methods which may be adopted described in more detail in Manly (1986: 83) and Norusis (1985: 137) and are

also available as options in the SPSSX program (SPSS-X INC, 1986: 718) are:

a) Maximum likelihood, which is described as theoretically very good and might well be used as the final method of analysis;

b) 'Little-Jiffy', which Manly does not recommend for beginners;

c) Principal axis factor analysis, which Manly does not recommend for beginners;

d) Unweighted least-squares method;

e) Generalized least-squares method;

f) The alpha method.

5A3.3.2.4.2. Obtaining Unrelated Factors

In principal components analysis, linear combinations of the observed variables are formed. The first principal component is the combination that accounts for the largest amount of variance in the sample. The second principal component accounts for the next largest amount of variance and is uncorrelated with the first and so forth, with each successive component explaining progressively smaller portions of the total sample variance until all the principal components have been accounted for, all uncorrelated as presented in the previous section. Refer to equation 5A3.27 and the generalised equations 5A3.28 as 5A3.29

Finding the unrotated factors for principal components analysis involves manipulating the inverse relationship from the transformed z values. Thus in general, given p variables from

x_1 to x_p, the total number of principal components will be of the form (Manly, 1986:76-78):

Equation 5A3.30 Determination of principal components

$$\left.\begin{aligned} Z_1 &= b_{11}x_1 + b_{12}x_2 + \ldots + b_{1p}x_p \\ Z_2 &= b_{21}x_1 + b_{22}x_2 + \ldots + b_{2p}x_p \\ &\vdots \\ Z_p &= b_{p1}x_1 + b_{p2}x_2 + \ldots + b_{pp}x_p \end{aligned}\right\}$$

where b_{ij} values = the eigenvectors of the correlation matrix.

$$= a_{ji}\sqrt{\lambda_i}$$

where λ_i = i th eigenvalue

The transformation from x values to z values is orthogonal (i.e. uncorrelated) and hence the inverse for the unrotated factor model is as presented earlier in equation 5A3.1:

Equation 5A3.1 Inverse of principal components for unrotated factor model

$$\left.\begin{aligned} x_1 &= a_{11}F_1 + a_{12}F_2 + \ldots a_{1m}F_m + e_1 \\ x_2 &= a_{21}F_1 + a_{22}F_2 + \ldots a_{2m}F_m + e_2 \\ &\vdots \\ x_p &= a_{p1}F_1 + a_{p2}F_2 + \ldots a_{pm}F_m + e_p \end{aligned}\right\}$$

where $a_{ij} = \sqrt{\lambda_j}b_{ji}$

5A3.3.2.4.3 Selecting the Most Important Factors

Once the unrotated factors had been obtained all that remained to complete the factor extraction step was simply to decide on the number of the main factors needed to concentrate on. As an aid in making the decision it is recommended to examine the percentage of the total variance of all the variables that is explained by each factor. The total variance for all the variables is the sum of the variance of each variable. For simplicity all variables and factors are presented in standardized form, with a mean of 0 and a standard deviation of 1. This is the normal standard deviation (Ehrenberg, 1981: 264-5). Each variable is standardized to have a variance of 1. The total variance is therefore equal to the sum of the diagonal unitary value of a correlation matrix. This is equal to the sum of eigenvalues. This in turn is equal to the sum of the number of variables. Finding the percentage attributable to a component merely involves dividing its loading by the total variance of all the factors (see Ehrenberg,1981:266). The larger the cumulative percentage attributable to a few factors, the fewer the number of factors that will be needed to explain the data. One of the aims is "to find the least possible number of components to account for the generally large number of test variables" (Ehrenberg, 1981: 266).

One criterion used, as a rule of thumb, to find a provisional solution of the number of unrotated factors (appropriate when principal component analysis is used) which was adopted in this study, is that only factors that account for variances greater than unity for the correlation matrix (Norusis,

1985: 131, Manly, 1986: 75) should be included. That is choosing m equal to the number of eigenvalues which have greater than unity for the correlation matrix (Norusis, 1985:131, Manly, 1986:75). The reasoning is that a factor with an eigenvalue (variance) of less than one is no better than a single original variable. This is so because the later has a variance of one. As a result, the factor explains less variation in the overall data than did this single variable. But this may not always be "a good solution (Tucker, Koopman, & Linn, 1969 quoted in Norusis, 1986:131).

As a further aid in confirming whether the number of factors determined was correct, a scree plot for each analysis was carried out. A scree is a plot of the total variance associated with each factor which shows a distinct break between the steep slope of the large factors and the gradual trailing off of the rest of the factors (Norusis, 1986: 131, see also Cattell, 1966). Norusis points out "experimental evidence indicates that the scree begins at the *k* th factor, where k is the true number of to factors"

5A3.3.2.4.4 Communality of a Variable and its Relationship to Types of Factors

After the factors have been selected, by discarding some of them, they take a reduced form of the generalised model given in equation 5A3.1. It contains the coefficients used to express a standardized variable in terms of the factors. Factors with large coefficients (factor loadings), in absolute value, for a variable are closely related to the variable. The matrix of factor

loadings is called the *factor pattern matrix*. When the estimated factor loadings are uncorrelated with each other (Orthogonal), the factor loadings are also said to be the correlations between the factors and the variables (Norusis, 1988: 133). This matrix is referred to as the *factor structure* matrix, which is the same as the factor pattern matrix when factors are orthogonal.

A different explanation of the factor matrix views loadings as the standardized regression coefficients in the multiple regression equation. Each of the original variables is regarded as the dependent variable while the factors are the independent variables. If the factors are uncorrelated, the values of the coefficients are not dependent on each other. They therefore represent the *unique contribution* of each factor, and are the *correlations between the factors and the variable* (Norusis, 1988:133). These two sides of the same coin are generally referred to as the *uniqueness* of a variable and the *communality* of a variable.

It is easier to explain these two terms if it is recalled that the selected set of factors in the previous section comprised the most important factors since they normally accounted for the greatest variance in the variables. This was so because factors with progressively larger variance were chosen. Exhibiting large variance, therefore indicated that these factors explained the largest percentage of the total variance in the variables. This therefore meant that the variables whose variance was explained by the same factors were highly correlated. If this was the case, then the variables must have some shared common

elements with the factors. The sharing of common factors is referred to as the *communality* of the variable. This was referred to as general factors in section 5A3.3.1.3 which dealt with the three groups of factors. The share or proportion of variance explained by the common factors for each variable can be obtained by squaring the coefficient correlation or factor loading of each of the common factors and the same variable and summing them up (Norusis, 1988: 133). These coefficients were the ones obtained by relating each variable with the factors in the Factor matrix referred to above and in equation 5A3.1 shown as a_{ij} when obtaining unrotated factors was discussed in 5A3.3.2.4.2.

When all the factors (Principal components) are included in a solution, all of the variance of each variable is accounted for, and there is no need for a unique factor in the model. In such a case, the proportion of variance accounted for by the common factors is 1 (100%) for each of the variables from the total variance of all the variables, which is equal to the number of variables. But nothing has been gained since there are as many factors as variables. It will be recalled that the whole purpose of factor analysis is to reduce the number of factors to a few that will explain the data.

Hence, when a few factors are selected to describe the original variables, a proportion of the variance that is not explained by the communality of a variable remains. The range of the variance explained by the common factors can be from 0 to 1 with 0 indicating that the common factors explain none of the

variance, and 1 revealing that all the variance is explained by the common factors. "The variance that is not explained by the common factors is attributed to the unique factor and is called the uniqueness of the variable." This was referred to as a specific factor in section 5A3.3.1.3.

5A3.3.2.4.5 Testing How Good the Model Fits the Data

The last point to be made in this subsection is that before the factors were rotated, a test of the magnitudes of the residuals was done to determine how well the fitted model reproduced the observed correlations. Residuals are simply differences between observed correlations and estimated correlations. They are interpreted just like any other differences between observed and estimated values. In this case, the greater the differences in absolute value and the larger their proportion to total differences between pairs of variables, the greater the chances that they are dissimilar and the more likely that the model does not fit the data. The percentage of the residuals which are greater than 0.05 in absolute value is calculated. The observed correlation coefficients between pairs of variables were merely read off from the initial correlation matrix. The estimated correlation coefficients between variables were estimates from computed correlations between the variables and the factors. They can be used since one of the basic assumptions of factor analysis is that the observed correlations between pairs of variables is due to the sharing of common factors (Norusis, 1988:134). The estimated correlation coefficients for a pair of variables were found by summing up each of the products of the coefficient correlations between each

of the two variables (making a pair) and each of the factors. Thus in general, if factors are orthogonal, the equation for the estimated correlation coefficient for variables i and j is (Norusis, 1988: 134) (Refer to chapters 6 and 9 for application):

Equation 5A3.31 Estimated correlation coefficient between two variables

$$r_{ij} = \sum_{j=1}^{k} r_{fi}\, r_{fj} = r_{1i}\, r_{ij} + r_{2i}\, r_{2j} + \ldots . r_{ki}\, r_{kj}$$

where

k = the number of common factors

r_{fi} = correlation between the fth factor and the ith variable

5A3.3.2.5. ROTATING FACTORS

5A3.3.2.5.1. Introduction

The next step after extracting factors, which was the fifth in factor analysis, was factor rotation. As an aid to explaining and understanding what rotation means, it is important to recall that sections 5A3.3.1.3 and 5A3.3.2.2 showed the difference between common and specific factors. It was for example stated in section 5A3.3.2.2.2 that high correlation between each of the variables and each of the factors indicated that a great percentage of the variance in the variable was explained by the common factors and a small percentage by the specific factors.

High correlation of a variable with many factors is however an undesirable situation since it becomes difficult to explain the most important factor that relates to a variable. Likewise,

high correlation of a factor with many variables prohibits identification of the most important variables that are related to a particular factor. Taken to the extreme then, if all variables are highly related to a factor, it becomes difficult to identify and explain which variables belong together to form a particular factor. In other words such a situation is no better than the initial analysis stage.

5A3.3.2.5.2 Purpose of Factor Rotation

Since most factors are correlated with many variables in the factor matrix obtained after the extraction stage, the variables and factors do not appear correlated in any interpretable pattern. This means each variable has high factor loadings on more than one factor. Likewise each factor has high loadings on many variables. But it has been stressed throughout this discussion that one of the goals of factor analysis is to identify factors that are substantively meaningful in the sense that they summarize sets of highly related homogeneous groups of variables which are unrelated to other groups of variables.

Therefore the purpose of the rotation phase was to transform the matrix of provisional factors into a matrix of new factors that were easier to interpret. This basically meant breaking up each of the original general or common factors among variables by "rotating" in order to obtain a simpler structure that was most meaningful. This required to have high loadings for each of the factors relating to a homogeneous highly related group of variables and low loadings for each of the other groups of variables forming separate factors so that each factor could be

differentiated and named. The whole point was an attempt for each factor to have near zero loadings for a large number of variables on one hand. The aim was to track down group factors. This was helpful in interpreting the factors. There was also a need for each variable to have zero loadings on all other factors except a few, preferably one, on the other hand. The aim was to discover pure variables each of which had a high loading on just one factor. This enabled the factors to be differentiated from each other (Cronbach, 1960:255; Norusis, 1988:139-140; Manly, 1986:75, 80). When provisional factors were transformed into new factors equation 5A3.1 then became (Manly, 1986: 77):

Equation 5A3.32 Rotated factors

$$x_1 = g_{11}F^*_1 + g_{12}F^*_2 + \ldots + g_{1m}F^*_m + e_1$$

$$x_2 = g_{21}F^*_1 + g_{22}F^*_2 + \ldots + g_{2m}F^*_m + e_2$$

$$\vdots$$

$$x_p = g_{p1}F^*_1 + g_{p2}F^*_2 + \ldots + g_{pm}F^*_m + e_p$$

where

F^*_i = new ith factor

5A3.3.2.5.3 Selected Method for Factor Rotation

The method determined appropriate for rotation was orthogonal simply because the aim of analysis was to find factors that were uncorrelated. In orthogonal, the axes are maintained at right angles. The other alternative method was oblique, where rotation is not maintained at right angles, and correlation among factors exists. This may sometimes be a desirable result. For

more discussion of differences between the two, refer to Norusis pages 139 and 145 to 146. The algorithm used for orthogonal rotation was *varimax* because it is the most commonly used method, recommended as the standard approach (Norusis, 1988: 140, Manly, 1986: 75-76). Variance rotation which may be normalized, pioneered by H.F. Kaiser maximizes the sum of variances for all the factors (Manly, 1986:75):

> "This is based on the assumption that the interpretability of factor j can be measured by the variance of the square of its factor loadings, i.e.the variances of a_{1j}^2, a_{2j}^2, . . . , a_{pj}^2. If this variance is large than the a_{ij}^2 values tend to be either close to zero or close to unity."

It therefore attempts to "minimize the number of variables that have high loadings of factor" (Norusis, 1988:140). Other possibilities were *quartimax*, and *equamax*. Refer to Norusis p.141 for detailed differences.

For visualisation of the practical difference between unrotated and rotated factors refer to chapter 6 and 9 where they are shown in tabular form and to chapter 6 appendix figures 6A2.2 and 6A2.3 where two figures are shown in the space before and after rotation. The most important point to note is that if rotation has achieved a simple structure, then clusters of variables should occur near the ends of the axis and at their intersection. Variables at the end of an axis are those that have high loadings only on that factor. But those near the origin of the plot have small loadings on both factors. Variables that are not near the axis are explained by both factors (see Norusis, 1988: 144).

5A3.3.2.5.4. Interpretation and Naming of Factors

Before concluding factor analysis, it is worth mentioning that in order to easily identify the factors, it was found necessary to group the variables that had large loadings for the same factors. The most convenient strategy adopted was to sort the factor pattern matrix so that variables with high loadings on the same factor appeared together. Further a possible alternative in displaying such a table was to ignore all small factor loadings with absolute values less than 0.5. This was however not done so that such values could be seen. This was however unimportant aspect since when it came to naming the factors "concentration was on large factor loadings above 0.50", which is the practice (Cronbach, 1960: 253; Norusis, 1986: 145; Manly, 1986: 80). The actual process of naming factors is dealt with in chapter 6 and 9.

CHAPTER 9 APPENDIX 9B: OPERATIONS ON MATRICES AND MATRIX INVERSION.

5A4.1 OPERATIONS ON MATRICES

The ordinary arithmetic operators of addition, subtraction, multiplication and division have their counterparts with matrices. As in any functions, addition and subtraction are the easiest as they simply involve working out through matrices element by element in a corresponding 3 for matrices of an equal size. Thus, if A and D are both 3 X 2 matrices, then:

Equation 5A4.1 Addition of matrixes.

$$A+D = \begin{bmatrix} a_{11} & a_{12} \\ a_{21} & a_{22} \\ a_{31} & a_{32} \end{bmatrix} + \begin{bmatrix} d_{11} & d_{12} \\ d_{21} & d_{22} \\ d_{31} & d_{32} \end{bmatrix} = \begin{bmatrix} a_{11} + d_{11} & a_{12} + d_{12} \\ a_{21} + d_{21} & a_{22} + d_{22} \\ a_{31} + d_{31} & a_{32} + d_{32} \end{bmatrix}$$

Equation 5A4.2 Subtraction of matrices

$$A-D = \begin{bmatrix} a_{11} & a_{12} \\ a_{21} & a_{22} \\ a_{31} & a_{32} \end{bmatrix} - \begin{bmatrix} d_{11} & d_{12} \\ d_{21} & d_{22} \\ d_{31} & d_{32} \end{bmatrix} = \begin{bmatrix} a_{11} - d_{11} & a_{12} - d_{12} \\ a_{21} - d_{21} & a_{22} - d_{22} \\ a_{31} - d_{31} & a_{32} - d_{32} \end{bmatrix}$$

An ordinary number such as 20 is called a *scalar*. Multiplication of a matrix A, given above, by a scalar implies that every element of A must be multiplied by k. Then matrix A above becomes:

Equation 5A4.3 Multiplication of a matrix by a scalar

$$k\,A = \begin{bmatrix} ka_{11} & ka_{22} \\ ka_{21} & ka_{22} \\ ka_{31} & ka_{32} \end{bmatrix}$$

The process of multiplying two matrices together is more complex. First and foremost two matrices A and B can be multiplied if and only if the number of columns of A is equal to the number of rows of B. Given A of size $m \times n$ and B of size $n \times p$ then (Manly, 1986: 20):

Equation 5A4. 4 Multiplication of matrices

$$A.B = \begin{bmatrix} a_{11} & a_{12} & \cdots & a_{1n} \\ a_{21} & a_{22} & \cdots & a_{2n} \\ \vdots & & & \\ a_{m1} & a_{m2} & \cdots & a_{mn} \end{bmatrix} \times \begin{bmatrix} b_{11} & b_{12} & \cdots & b_{1p} \\ b_{21} & b_{22} & \cdots & b_{2p} \\ \vdots & & & \\ b_{n1} & b_{n2} & \cdots & b_{np} \end{bmatrix}$$

$$= \begin{bmatrix} \Sigma a_{1j} b_{j1} & \Sigma a_{1j} b_{j2} & \cdots & \Sigma a_{1} b_{jp} \\ \Sigma a_{2j} b_{j1} & \Sigma a_{2j} b_{j2} & \cdots & \Sigma a_{2j} b_{jp} \\ \vdots & & & \\ \Sigma a_{mj} b_{j1} & \Sigma a_{mj} b_{j2} & \cdots & \Sigma a_{mj} b_{jp} \end{bmatrix}$$

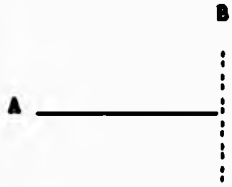
where

Σ = summation for all $j = 1, 2, 3, \ldots, n$.

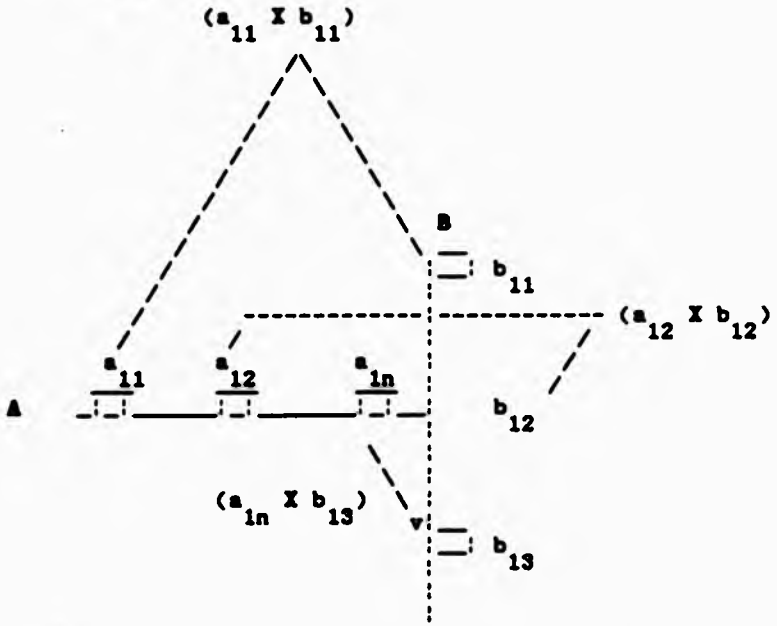
Thus the element in the i th row and k th column of - A. B is

$$\Sigma a_{ij} b_{jk} = a_{1i} b_{1k} + a_{i2k} b_{2k} + \ldots + a_{in} b_{nk}$$

When multiplying matrices of this type it is simpler to think of a row of matrix A and a column of matrix B as forming a T - junction on its side as



Then to obtain an element of the multiple of A X B each element is multiplied by its corresponding element and summed up. Thus to continue with the above T - junction example, to obtain the first element of row one column one of A X B would require multiplying first element by first element, second element by second element and third element by third element of A X B, then sum them up as:



If A and B are square, then A. B and B. A are both defined. But even if that is true, A. B and B. A are not generally equal as in :

Equation 5A4.5 Equality of multiples of the same matrices

$$A \cdot B = \begin{bmatrix} 3 & -1 \\ 1 & 2 \end{bmatrix} \times \begin{bmatrix} 2 & 1 \\ 0 & 1 \end{bmatrix} = \begin{bmatrix} 6 & 3 \\ 2 & 3 \end{bmatrix}$$

Found as: $(3 \times 2) + (-1 \times 0) \quad (3 \times 1) + (-1 \times 1) = 6 \quad 3$

$(1 \times 2) + (2 \times 0) \quad (1 \times 1) + (2 \times 1) = 2 \quad 3$

but

$$B \cdot A = \begin{bmatrix} 2 & 1 \\ 0 & 1 \end{bmatrix} \times \begin{bmatrix} 3 & -1 \\ 1 & 2 \end{bmatrix} = \begin{bmatrix} 7 & 0 \\ 1 & 2 \end{bmatrix}$$

Found as: $(2 \times 3) + (1 \times 1) \quad 2(-1) + (1 \times 2) = 7 \quad 0$

$(0 \times 3) + (1 \times 1) \quad 0(-1) + (1 \times 2) = 1 \quad 2$

5A4.2 MATRIX INVERSION

Matrix inversion is similar to the ordinary arithmetic process of division. Inverse matrices are only defined for square matrices. But all matrices do not have an inverse. Given a scalar k, it is true that $k \times k^{-1} = 1$. Likewise, if A is a square matrix, then its inverse is A^{-1} where $A \times A^{-1} = I$, this being an identity matrix (a square matrix with all values equal to zero except the diagonal where it is 1, as discussed in chap 11). Where A^{-1} exists, it is both a right and left inverse so that $A^{-1A} = A\,A^{-1} = I$.

An inverse of a 2 x 2 matrix, if it exists, can be found as:

Equation 5A4.6 Inverse of a matrix

$$\begin{bmatrix} a_{11} & a_{12} \\ a_{21} & a_{22} \end{bmatrix}^{-1} = \begin{bmatrix} a_{22}/\Delta & a_{12}/\Delta \\ -a_{21}/\Delta & a_{11}/\Delta \end{bmatrix}$$

where delta, $\Delta = a_{11}a_{22} - a_{12}a_{21}$

In this case, the scalar quantity Δ is called the *determinant* of the matrix. It can be seen that the inverse is not defined if $\Delta = 0$, since calculating the elements of the inverse requires a division by zero. Therefore if a determinant of a matrix is zero, the inverse does not exist and vice versa . A matrix with a zero determinant is referred to as singular. An example of an inverse matrix is:

Equation 5A4.7 An example of an inverse of a matrix

$$\begin{bmatrix} 2 & 1 \\ 1 & 2 \end{bmatrix}^{-1} = \begin{bmatrix} 2/3 & -1/3 \\ -1/3 & 2/3 \end{bmatrix}$$

where $\Delta = (2 \times 2) - (1 \times 1) = 3$

The results in the example above can be checked by finding the identity matrix through multiplying A by its inverse as:

Equation 5A4.8 Identity matrix

$$A A^{-} = I$$

$$\begin{bmatrix} 2 & 1 \\ 1 & 2 \end{bmatrix} \times \begin{bmatrix} 2/3 & -1/3 \\ -1/3 & 2/3 \end{bmatrix} = \begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix}$$

calculated as:

$$\begin{bmatrix} 2(2/3) + 1(-1/3) & 2(-1/3) + 1(2/3) \\ 1(2/3) + 2(-1/3) & 1(-1/3) + 2(2/3) \end{bmatrix} = \begin{bmatrix} 1 & 0 \\ 0 & 1 \end{bmatrix}$$

There are some matrices for which the inverse is equal to the transpose. They are called *orthogonal*. Thus A is orthogonal if $A^{-1} = A^{-}$

5A4.3 QUADRATIC FORMS

Given an A matrix of size $n \times n$ and X column vector of length n. Then the *quadric form* is:

Equation 5A4.9 quadratic form of an identity matrix

$$Q = X'AX$$

This is a scalar which can be written as:

Equation 5A4.10 quadratic form as a scalar matrix

$$Q = \sum_{i=1}^{n} \sum_{j=1}^{n} x_i \, a_{ij} \, x_j$$

where x_i = element in the i th row of X

a_{ij} = element in the i th row and j th column of A

CHAPTER 5 APPENDIX 5 EXHIBITS

EXHIBIT 5A5.1 GUIDELINES TO RESEARCH ASSISTANTS IN CONDUCTING BUSINESSMEN INTERVIEW.

A. PREPARING FOR INTERVIEWING

1) Prepare for the following day's itinerary the night before the interview.
2) Determine the general direction where interviews would be done and map out your route.
3) Decide on the number of firms and the particular business that you will start locating.
4) Know the number of and the names firms that you have appointments with the following day and the times of appointment.
5) Revise the questionnaire and know the proper sequence of asking the questions properly.
6) Know the questions that need skipping and comparing.
7) Dress smartly, a suit if possible to enhance acceptability and accessibility.
8) Always carry the University Student identification card or any other card on you.
9) Carry with you the District Council's authorisation letter to conduct research in the District.
10) Take with you the researcher's introductory letter authorising you to help him in the interviewing process.
11) Take with you copies of the introductory letter sent to businessmen and University support letters from the Staff Development Officer and the Dean of the School.
12) Speak confidently and persuasively but not arrogantly to gain access to the premises and to the owner or MD.

B. SEARCHING FOR AND GAINING ACCESS TO THE FIRM'S PREMISES

13) Use street maps to locate the road.

14) Where a street map is not available, ask for a road or area or business name, or owner's name. [No street map was available for Ndola from the Ministry of Lands H.Q, Kitwe outskirts, Lusaka's industrial area or farming areas].

15) Telephone the owner or managing director if premises can not be located, to find out where it is.

16) Remember and note the next firm's name to be interviewed and refer to it in your conversions.

17) Remember the produot(s) of the firm and describe it (them) when seeking for the premises of the business or seeking audience with the owner.

18) Remember the name of the owner/Director when looking for premises or seeking audience with the owner.

19) Ask for the owner or Managing Director (MD.) of the firm by name to gain access to the premises.

20) Indicate courteously that a letter had already been sent to Mr. so and so, seeking an appointment in order to overcome refusals by security guards, receptionists or secretaries.

21) Ask for permission to talk to the owner or MD. himself if no such letter has not yet been received.

22) When refused access to the premises or owner / M.D.,do not give up, emphasise politely the importance of the study and the need to talk to the owner/M.D before leaving.

23) Offer to return later if the person you want is not available. Do not interview any other person. Ask when s/he would be available and ask for an appointment.

C. PREPARING FOR AN INTERVIEW: GAINING ACCESS AND CONFIDENCE FROM OWNER/M.D.

24) Introduce yourself and explain your mission to the owner. Ask whether an introductory letter regarding the research being conducted by Mr. Chama, a lecturer at SBIS had been received.

25) Apologise if a letter has not yet been received. Explain the contents of the letter.

26) Be empathetic and show understanding if he tells you that he is too busy or if you find him ill.

27) Emphasise the importance of the project politely. Inform him courteously that he can not be replaced by another respondent and hence the need to reschedule the interview.

28) Offer to come back later. Ask for a suitable date and time for him to see you if he is unable to give you an interview.

29) Thank him for his time of listening to you and for giving you an appointment.

30) Always keep to the time of the appointment. Apologise sincerely and give explanation if you can not avoid arriving late for the interview.

31) When conducting interviews in residential areas, never stand up while the respondent is sitting down. In the Zambian culture looking down on the head of an elder is disrespectful. Always kneel down or sit down on the veranda's floor or even on the ground if you are enquiring about the business owner or introducing yourself to the owner or conducting an interview when the person you are talking to is sitting down on a stool or a chair or a mat

and you yourself have not yet been offered a mat, a stool or a chair.

32) Inform the respondent politely the approximate time that the interview would last (about 40 minutes). It is pertinent so that he is aware, can offer you full attention, can adjust his plans and mind.

33) Avoid conducting an interview in the presence of other people observing. It may bias his responses and may be disruptive. Some respondents would take you to a secluded place once they know the seriousness of the interview. Ask politely if only the two of you could be present if the potential of disruption by onlookers is high.

34) Where two business owners are available, you may interview them together on the factual questions. But advice them about the need to speak to one of them (preferably the senior partner) on the attitudinal and government policy questions.

35) Describe the project and the sponsors, i.e. University of Zambia.

36) State the type of information needed. This is general information about business, business employment creation, their views on some aspects of government's small business policies. Views on government's leadership code policy.

37) Indicate the five basic uses of the information needed as:

a) He would help the government in determining small business policies.

b) He would assist the University of Zambia in designing courses that would be useful in encouraging students to start own business or work in small business.

c) He would help you, other University students and other potential entrepreneurs to learn about the requirements and process of starting a business.

d) The information collected may help some businessmen in getting necessary assistance from government and private agencies.

e) He would help the researcher in obtaining required data for further studies.

38) Assure him of anonymity and confidentiality at the beginning and Constantly during the interview process as need arises. Inform him that results of the study will be aggregated and no individual responses will be reported.

39) If they ask how and why they were picked, let them know that particulars about their business were obtained from a public source, the Ministry of Commerce since it is available to anybody. As regards the reason why they were picked, assure them that it was by chance through using numbers, like in the Zambia State Lottery, and many others have also been selected in the manufacturing sector. Emphasise that you are there to learn.

D. CONDUCTING THE INTERVIEW: DOs

40) Be attentive through out the interviewing process, even if the owner M.D disrupts the interview by attending to other matters such as answering a telephone call, or talking to other people who come in.

41) Be patient and understanding if the interview is halted several times for any reason. Remember that you are begging for his time for which you should genuinely appreciate.

42) Speak in a calm, but confident voice through out the interview.

43) Record the response immediately by ticking or completing.

44) Record responses to open ended questions in verbatim, as he says it not the way you would like or enjoy the answer to be.

45) Assure him that there is no wrong or right answer. His response is always the right one.

46) Repeat a question if it is not understood. Explain as closely as possible to the way it is structured and it means if it is not understood in spite of your repetition.

47) Apologise if the time you have promised him is up and you have not finished the interview.

48) Look genuinely concerned as he may have some other matters to attend to. But mention the problems of scheduling another time to continue the interview. These include the possibility of lack of an opportune time since businessmen are always busy people, shortage of time at your disposal due to the necessity of completing the study within a limited time, how behind you already are from your initial schedule, other scheduled appointments with other managers.

But emphasise how lucky you have been and how appreciative you are for having already given you his time. Promise to complete the interview in the shorted time possible. Most businessmen would not mind you completing.

49) Agree to postpone the interview if he is unable to continue the interview in spite of your pleas. Arrange for a specific suitable time for you to go back.

50) At the end of the interview, remember to sincerely thank him for giving you his valuable time and for his valuable contribution, even if the interview was not concluded.

51) Ask him if he could give you his contact address to send him a summary of the research findings as a token of thanking him for his assistance. Most will be glad to do so, if everything went well up to the end of the interview.

52) Thank him once again before leaving the place of interview.

E. <u>CONDUCTING THE INTERVIEW: DON'TS</u>

53) Do not interview any other person other than the owner or director of the firm. Indicate the need for the owner or M.D. to respond to the section on personal questions and leadership code.

54) Do not show frustration and anger if the interview is postponed several times. You may emphasise the need for, urgency for and the time constraints involved in the project. Remember he is doing <u>you</u> a favour by accepting the interview.

55) Do not give the questionnaire to the respondent to read even if he insists. He may become prejudiced to the questions. Merely re-emphasise the purpose of the answers you are

seeking. Assure him of anonymity and confidentiality of his responses. You may read one or two questions in order to gain his confidence.

58) Do not give an impression that his response is acceptable or wrong by showing surprise through kinetic behaviour or vocal, or facial expressions, or shaking or nodding your head or expressly showing your feeling on a particular issue. If you are asked about your opinion, for example on Leadership Code, politely state that you do not know and this is why you are conducting the interviews in order to learn about what the businessmen who are in the field. Remember your primary responsibility as a researcher is to find out not to express your feelings regardless of your stand at a particular issue.

57) Avoid opening statements that appear authoritative or demean the respondent or subject him to answer in a particular way. For example the statement, "if you don't know what leadership code means, I will first tell you all about it", implies that the respondent is not knowledgeable. No person likes to appear stupid or ignorant about an issue. Likewise, a statement that begins with "I am sure you have heard about Leadership code. I shall merely amplify it", expects the respondent to say, "yes" and will force him to give you what he thinks you want to hear.

58) Do not pose for too long between questions if you are not writing his reply.

59) Do not be afraid to ask him politely to slow down to give you a chance of writing down his answers. He will just be too pleased to know that everything he is saying is of great importance to you.

60) Do not gaze at him when you ask open ended questions, without writing, or else he would think you are wasting his time since you are less likely to remember everything he said when you leave him. Alternatively, he may think what he is saying is of no value to you.

61) Do not be afraid to remind the respondent politely and positively to continue discussing the main issues if he goes astray, explaining issues that are of no significance to the study. Assure him that you are enjoying his revelations but that you would not like taking too much of his precious time since you have some more other issues to ask him.

E. <u>AFTER THE INTERVIEW</u>

62) Go through the entire questionnaire checking all the entries.

63) Complete all gaps while the information is still fresh in your mind.

64) Record all the day's activities in the notebook which has been given to you. Research assistants with fully completed questionnaires and notebooks will receive monetary rewards.

65) Aim to complete 5 questionnaires a day. Research assistants achieving 5 questionnaires a day or conducting more questionnaires than other research assistants will be given extra remuneration.

Exhibits For Chapter 10-Titles

Exhibit 5A5.2 Introductory letter for Research Assistants

THE UNIVERSITY OF ZAMBIA

(NDOLA CAMPUS)

SCHOOL OF BUSINESS AND INDUSTRIAL STUDIES

P.O. Box 21692 - KITWE - ZAMBIA

Telephone: [illegible]/215326/215761 Telegrams: Unzando Kitwe

Your Reference:
Our Reference:

10th October, 1986

Dear Sir/Madam

Re: Mr Reggie Phiri

The above named person is a research assistant to me in the project entitled "Entrepreneurial Formation Process and Government Policy". He is a University student, whose identity can be verified.

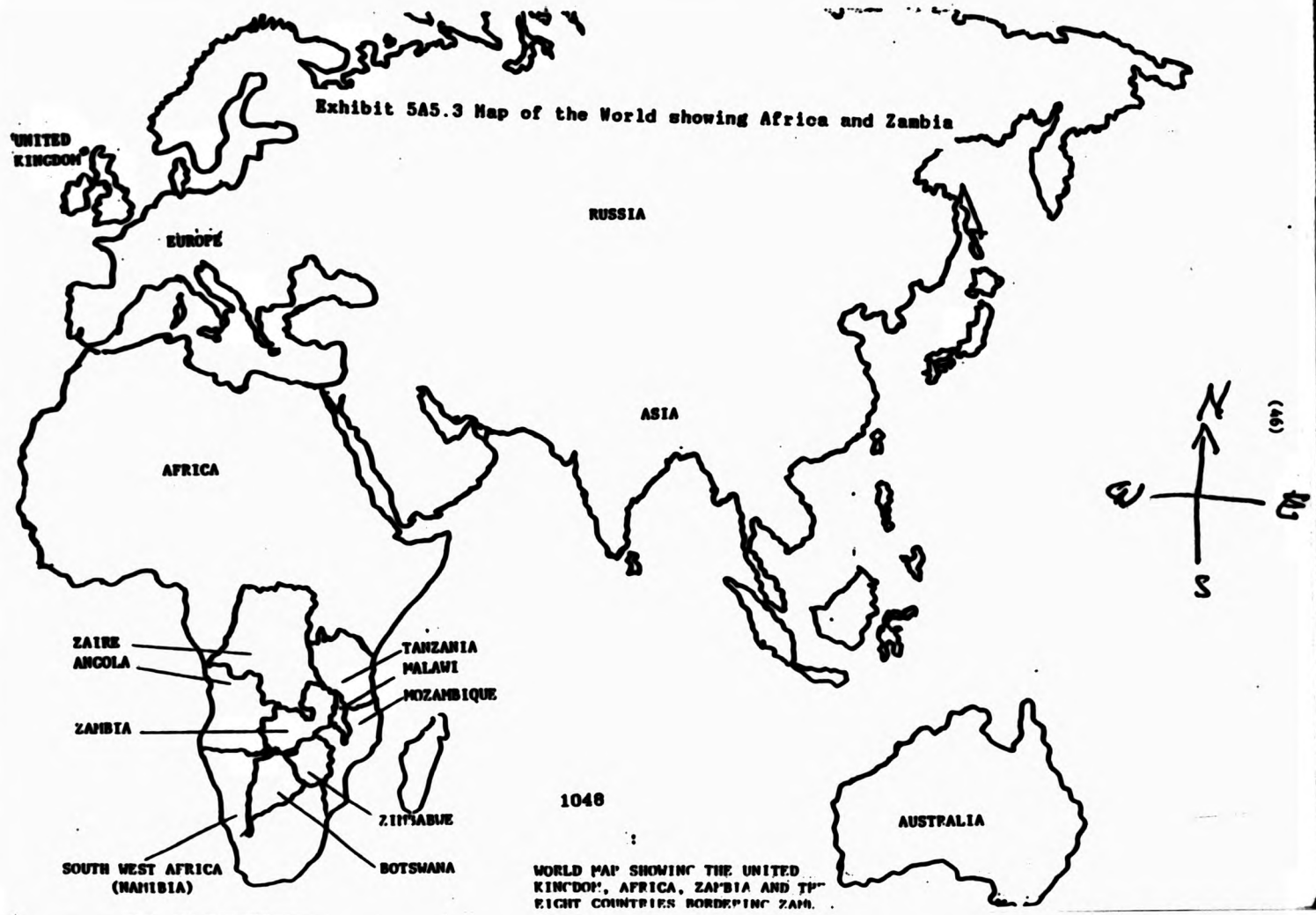
I would appreciate very much if you would give him all the necessary assistance and cooperation.

Thanking you in advance for your anticipated favourable response.

Yours faithfully

C. M. Chama

Exhibit 5A5.3 Map of the World showing Africa and Zambia



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WORLD MAP SHOWING THE UNITED KINGDOM, AFRICA, ZAMBIA AND THE EIGHT COUNTRIES BORDERING ZAMBIA.

Exhibit 5A5.4 Map of Zambia showing the nine provinces and Provincial Towns

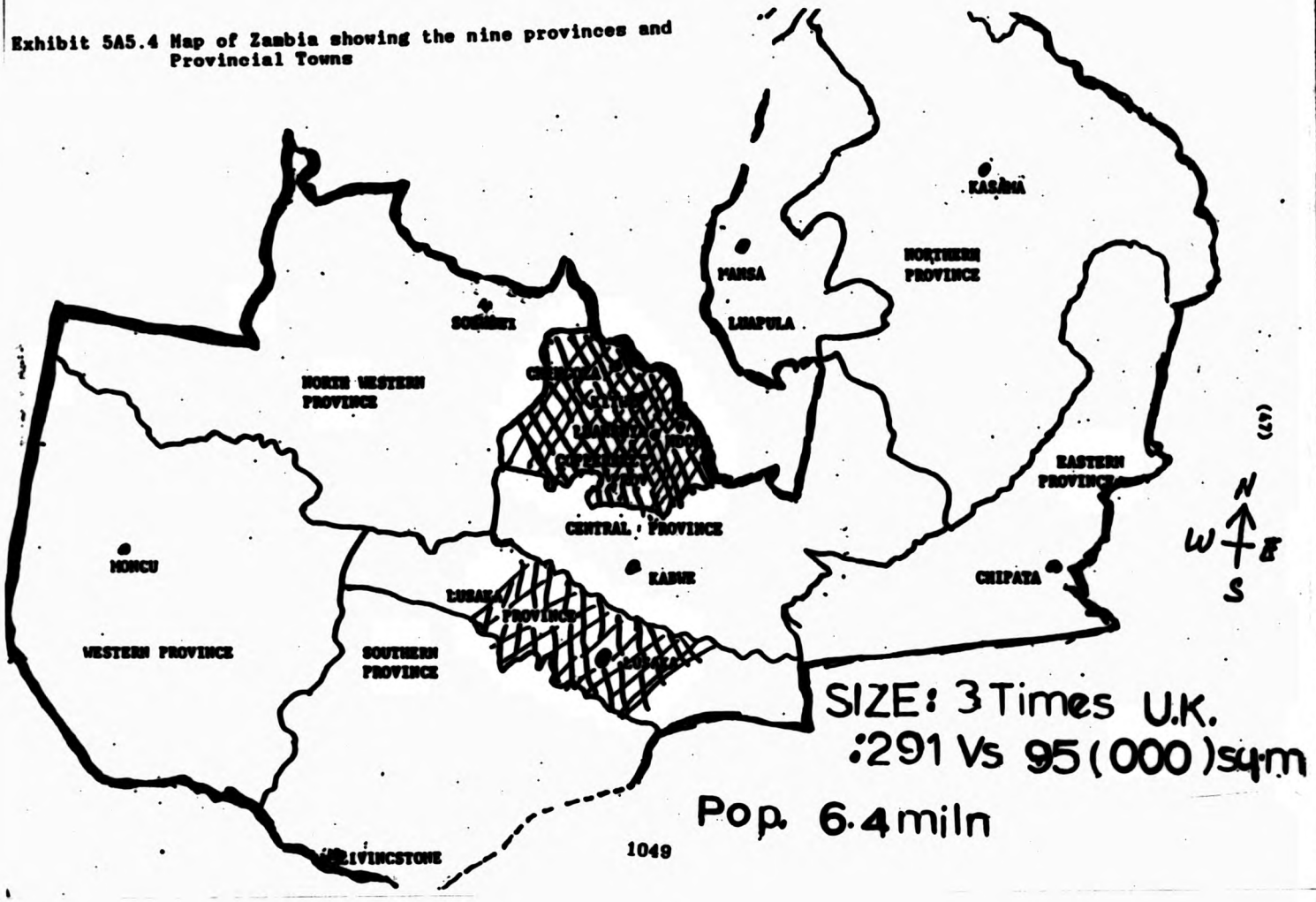

Exhibit SA5.5 Dean's introductory letter to undergraduates

THE UNIVERSITY OF ZAMBIA
(NDOLA CAMPUS)
SCHOOL OF BUSINESS AND INDUSTRIAL STUDIES
P.O. Box 21692 - KITWE - ZAMBIA

Telephone: 210841/215536 Telegrams: Unzando Kitwe

Your Reference:
Our Reference:

Dear Mr. Musako

Career Plans and Expectations Among SBIS Undergraduates

I write to solicit your full cooperation in the above-named project by completing the attached questionnaire.

This study has the full blessing of the School of Business and Industrial Studies. Your responses will constitute vital feedback to the University of Zambia on the relevance of the business and accounting degree programmes to the development of Zambia. It is important that you, as a direct beneficiary of the education offered at SBIS, comment on the adequacy of the education provided at SBIS in preparing you for your career.

This work is being pioneered by Mr Chama, a Zambian academic member of staff at SBIS and currently on study leave at the University of Stirling.

We at SBIS look forward very much to the results of this study and I wish to thank you for your contribution in this project.

Yours sincerely

J M TEMBO (DR)
DEAN - SCHOOL OF BUSINESS & INDUSTRIAL STUDIES

Encls.

Exhibit 5A5.6 Undergraduates' reminder letter

THE UNIVERSITY OF ZAMBIA
(NDOLA CAMPUS)
SCHOOL OF BUSINESS AND INDUSTRIAL STUDIES

P.O. Box 21692 - KITWE - ZAMBIA

Telephone: 210841/215526

Telegrams: Unzando
Kitwe

Your Reference:
Our Reference:

12th November, 1986

Dear Mr Silumo

Re: CAREER PLANS AND EXPECTATIONS AMONG SBIS UNDERGRADUATES
SELF-ADMINISTERED QUESTIONNAIRE

On 29th September, 1986, a self addressed stamped questionnaire was sent to you for completion and returning. But I have not received it up to now.

As I am already terribly behind schedule, I would appreciate if you would please assist me by completing the questionnaire and return it by ~~15th November, 1986~~ 8/12/86 at the above address to Mr C M Chama. In case the first questionnaire has been misplaced, please kindly find a replacement for your convenience. I am sorry to keep on bothering you, but I cannot replace you by another respondent.

I once again appeal to you to bail me out by responding to the questionnaire. You may also wish to know that since I have already exhausted University research funds, the exercise is proving very costly since I have to use my personal money. I hope you will take this into consideration and assist me in this research project.

Yours sincerely

C M CHAMA

Exhibit 5A5.7 Undergraduates' final questionnaire cover letter

THE UNIVERSITY OF ZAMBIA
(NDOLA CAMPUS)
SCHOOL OF BUSINESS AND INDUSTRIAL STUDIES

P.O. Box 21692 - KITWE - ZAMBIA

Telephone: 210841/215326 Telegrams: Unzando Kitwe

Your Reference:
Our Reference:

26th September, 1996

Dear Mr. Silume,

RE: CAREER PLANS AND EXPECTATIONS AMONG SBIS UNDERGRADUATES SELF-ADMINISTERED QUESTIONNAIRE

I am kindly requesting you to assist me by completing the attached questionnaire and return it by 25th October, 1996 using the self addressed stamped envelope for your convenience to: C. M. Chama, at the above address.

I am a lecturer at the University of Zambia's School of Business and Industrial Studies (SBIS), currently studying at the University of Stirling, Department of Business and Management. I am conducting a research study on the performance of small businesses. As part of this study, it is intended to administer a questionnaire to undergraduates at the University of Zambia's School of Business and Industrial Studies. The purpose of this survey is therefore to find out student alternative career plans and their actual career patterns after leaving the University. Undergraduate students and graduates from SBIS have been specially selected for this project. The research study is being sponsored by the University of Zambia and is fully supported by the Small Industries Development Organisation (SIDO). It is also endorsed by the University of Stirling's department of Business and Management.

Significance of Results

After a pilot study, first to third year undergraduate students have been specially randomly selected to provide some valuable information by completing the appended questionnaire.

Great importance is attached to your responses because the results will be very useful to SBIS in designing and introducing future business courses. They will also be very beneficial to Small Industries Development Organisation (SIDO) in understanding career choice plans and patterns of SBIS students and graduates. This will in turn prove extremely useful in making their long term strategies. You will be pleased to know that your contribution will ultimately help the Government of Zambia and the nation as a whole, who are most zealous in developing policies about

at encouraging business ownership. The results will therefore ultimately assist in finding solutions to the unemployment crisis the country is now facing.

Questionnaire Structure

The questionnaire is divided into five sections.

Section I Solicits information on personal details.

Section II Requests information on your family.

Section III Seeks information on your alternative career plans and expectations.

Section IV Invites your views on the adequacy of SBMS undergraduate degree programme in preparing students to take up careers in small businesses by forming their own business or seeking employment in them, compared to working in large firms.

Section V Seeks your opinion on government business formation promotional policies and the leadership code.

I would like to kindly request you not to consult any other person in completing this questionnaire. You can rest be assured that there are no wrong or correct responses. The right answer is your own response. Your VIEWS are the most most important to me.

I would greatly appreciate if you would please kindly provide all the required information as incomplete questionnaires are not useful for purposes of statistical data analysis. If there is no appropriate answer, please include your own response. Would you please kindly allow me to mention that responses such as N/A meaning not applicable, or crossing out or skipping are not helpful as they are misleading.

I need not overemphasize that the information you provide will be treated with the utmost confidence and anonymity. The results of this research study will be available towards the end of 1987. If you are interested to have a summary of the statistics of the results, please supply your particulars and contact address in the space provided at the end of the questionnaire. If you would, however, like to know more about the study you may contact me at SBMS.

I am pleading with you to assist me by completing the questionnaire and return it to C.M. Chama UNZAMBO, P.O. Box 21692, Kitwe, Zambia within one week after receiving it.

I would like to thank you very much in advance for your anticipated cooperation in this important research.

Yours sincerely,

C. M. CHAMA

Exhibit SA5.9 Graduates' pilot questionnaire cover letter

THE UNIVERSITY OF ZAMBIA
(NDOLA CAMPUS)

SCHOOL OF BUSINESS AND INDUSTRIAL STUDIES
P.O. Box 21692 -- KITWE - ZAMBIA

Telephone: 210841/215326 Telegrams: Unzando Kitwe

Your Reference:
Our Reference:

29th June, 1986

M/s, Mr.

Dear

re: CAREER PLANS AND EXPERIENCES AMONG SBIS GRADUATES

I am a lecturer at the University of Zambia's School of Business and Industrial studies (SBIS), currently studying at the University of Stirling, Department of Business Management. I am conducting a research study on the performance of small businesses. As part of this study, it is intended to administer a questionnaire to graduates at the University of Zambia's School of Business and Industrial Studies. The purpose of this survey is therefore to find out student alternative career plans and their actual career patterns after leaving the University. Undergraduate students and graduates from SBIS have been specially selected for this project. The research study is being sponsored by the University of Zambia and is fully supported by the Small Industries Development Organisation (SIDO). It is also endorsed by the University of Stirling's department of business studies.

Significance of Results

As the first stage, 30 graduates have been specially randomly selected to provide some valuable information by completing the appended questionnaire.

Great importance is attached to your response because the results will be very useful to SBIS in designing and introducing future business courses. They will also be very beneficial to Small Industries Development Organisation (SIDO) in understanding career choice plans and patterns of SBIS students and graduands. This will in turn prove extremely useful in making their long term strategies. You will be pleased to know that your contribution will ultimately help the Government of Zambia and the nation as a whole, who are most anxious in developing policies aimed at encouraging business ownership. The results will therefore ultimately assist in finding solutions to the unemployment crisis the country is now facing.

P/...

Questionnaire Structure

The Questionnaire is divided into five sections.

Section I Solicits information on personal details.

Section II Requests information on your family.

Section III Seeks information on your alternative career plans and expectations.

Section IV Invites your views on the adequacy of SBUS undergraduate degree programme in preparing students to take up careers in small businesses by forming their own business or seeking employment in them, compared to working in large firms.

Section V Seeks your opinion on government business formation promotional policies and the leadership code.

I would like to kindly request you not to consult any other person in completing this questionnaire. You can rest be assured that there are no wrong or correct responses. The right answer is your own response. Your **VIEWS** are the **MOST** important to me.

I would greatly appreciate if you would please kindly provide all the required information as incomplete questionnaires are not useful for purposes of statistical data analysis. If there is no appropriate answer, please include your own response. Would you please kindly allow me to mention that responses such as N/A meaning not applicable, or crossing out or skipping are not helpful as they are misleading.

I need not overemphasise that the information you provide will be treated with the utmost confidence and anonymity. The results of this research study will be available towards the end of 1987. If you are interested to have a summary of the statistics of the results, please supply your particulars and contact address in the space provided at the end of the questionnaire. If you would, however, like to know more about the study you may contact me at SBUS.

I am pleading with you to assist me by completing the questionnaire and **return it** to Mr. C.M. Chama UNZAMBO, P.O. Box 21692, KITWE, Zambia **WITHIN ONE WEEK** after receiving it.

I would like to thank you very much in advance for your anticipated cooperation in this important research.

Yours sincerely,

C. M. Chama

Exhibit 5A5.10 Graduates' final questionnaire cover letter

THE UNIVERSITY OF ZAMBIA
(NDOLA CAMPUS)
SCHOOL OF BUSINESS AND INDUSTRIAL STUDIES

P.O. Box 21692 - KITWE - ZAMBIA

Telephone: 210841/215326

Telegrams: Unzando Kitwe

Your Reference:
Our Reference:

26th September, 1996

Dear Mr. Mwansa Prospery Chalwe,

re: CAREER PLANS AND EXPERIENCES AMONG SBIS GRADUATES SELF-ADMINISTERED QUESTIONNAIRE

I am kindly requesting you to assist me by completing the attached questionnaire and return it by 20th October, 1996 using the self addressed stamped envelope for your convenience to Mr. C. M. Chama, at the above address.

I am a lecturer at the University of Zambia's School of Business and Industrial Studies (SBIS), currently studying at the University of Stirling, Department of Business and Management.

Significance of Results

After a pilot study, SBIS Graduates have been randomly selected to provide some valuable information by completing the appended questionnaire. Once selected the sampling process adopted cannot allow substition of the respondent if she/he is unable to participate. It is /in in this respect that I am appealing to you to help me by spending some of your valuable limited time in completing the questionnaire.

Great importance is attached to your responses because the results will be very useful to SBIS in designing and introducing future business courses. They will also be very beneficial to Small Industries Development Organisation (SIDO) in understanding career choice plans and patterns of SBIS students and graduands. This will in turn prove extremely useful in making their long term strategies. You will be pleased to know that your contribution will ultimately help the Government of Zambia and the nation as a whole, who are most anxious in developing policies aimed at encouraging business ownership. The results will therefore ultimately assist in finding solutions to the unemployment crisis the country is now facing.

2/...

Questionnaire Structure

The Questionnaire is divided into five sections.

Section I Solicits information on personal details.

Section II Requests information on your family.

Section III Seeks information on your alternative career plans and expectations.

Section IV Invites your views on the adequacy of SMUS undergraduate degree programme in preparing students to take up careers in small businesses by forming their own business or seeking employment in them, compared to working in large firms.

Section V Seeks your opinion on government business formation promotional policies and the leadership code.

I would like to kindly request you not to consult any other person in completing this questionnaire. You can rest be assured that there are no wrong or correct responses. The right answer is your own response. Your VIEWS are the MOST important to me.

I would greatly appreciate if you would please kindly provide all the required information as incomplete questionnaires are not useful for purposes of statistical data analysis. If there is no appropriate answer, please include your own response. Would you please kindly allow me to mention that responses such as N/A meaning not applicable, or crossing out or skipping are not helpful as they are misleading.

I need not overemphasise that the information you provide will be treated with the utmost confidence and anonymity. The results of this research study will be available towards the end of 1987. If you are interested to have a summary of the statistics of the results, please supply your particulars and contact address in the space provided at the end of the questionnaire. If you would, however, like to know more about the study you may contact me at SMUS.

I am pleading with you to assist me by completing the questionnaire and return it to Mr. C.M. Chama UNZAMBO, P.O. Box 21692, KITWE, Zambia WITHIN ONE WEEK after receiving it.

I would like to thank you very much in advance for your anticipated cooperation in this important research.

Yours sincerely,

C. M. CHAMA

Exhibit 5A5.11 Graduates' appeal letter for contact addresses for other graduates

THE UNIVERSITY OF ZAMBIA

SCHOOL OF BUSINESS AND INDUSTRIAL STUDIES

P.O. BOX 21692

KITWE

5th October, 1988

Dear .....

I am requesting you to assist me by providing me as many names of any School of Business and Industrail Studies, UNZA/NDO graduates who are already either working or on studies in Zambia or outside. The purpose is for me to send them questionnaires. I am facing great difficulties in knowing the current addresses of the SBIS graduates.

Please kindly write the names below and return it to me at your earliest convenient time, preferably within a week as I do not have much time remaining.

1.

2.

3.

4.

5.

6.

7.

8.

9.

10.

11.

12.

13.

14.

15.

16.

I once again appeal to you to assist me urgently.

Thanking you in advance in anticipation of your assistance.

Yours sincerely,

C.M. Chama

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Exhibit 5A5.12 Dean's introductory letter to graduates

THE UNIVERSITY OF ZAMBIA
(NDOLA CAMPUS)
SCHOOL OF BUSINESS AND INDUSTRIAL STUDIES

P.O. Box 21692 - KITWE - ZAMBIA

Telephone: 210841/215326

Telegrams: Unzando Kitwe

Your Reference:
Our Reference:

Dear Mwansa Prospery Chalwe,

Career Plans and Experiences Among SBIS Graduates

I write to solicit your full cooperation in the above-named project by completing the attached questionnaire.

This study has the full blessing of the School of Business and Industrial Studies. Your responses will constitute vital feedback to the University of Zambia on the relevance of the business and accounting degree programmes to the development of Zambia. It is important that you, as a direct beneficiary of the education offered at SBIS, comment on the adequacy of the education provided at SBIS in preparing you for your career.

This work is being pioneered by Mr Chama, a Zambian academic member of staff at SBIS and currently on study leave at the University of Stirling.

We at SBIS look forward very much to the results of this study and I wish to thank you for your contribution in this project.

Yours sincerely

V BABIKANYISA
ACTING DEAN,
SCHOOL OF BUSINESS AND INDUSTRIAL STUDIES

Encls.

Exhibit 5A5.13 Graduates' Reminder letter

THE UNIVERSITY OF ZAMBIA
(NDOLA CAMPUS)
SCHOOL OF BUSINESS AND INDUSTRIAL STUDIES

P.O. Box 21692 - KITWE - ZAMBIA

Telephone: 210841/215526

Telegrams: Unzando
Kitwe

Your Reference:

Our Reference:

12 November, 1986

Dear Mr J. Mambo,

Re: CAREER PLANS AND EXPERIENCES AMONG SBIS GRADUATES SELF-ADMINISTERED QUESTIONNAIRE

On 26th September, 1986, a self addressed stamped questionnaire was sent to you for completion and returning. But I have not received it up to now.

As I am already terribly behind schedule, I would appreciate if you would please assist me by completing the questionnaire and return it by 25th November, 1986 at the above address to Mr C M Chama. In case the first questionnaire has been misplaced, please kindly find a replacement for your convenience. I am sorry to keep on bothering you, but I cannot replace you by another respondent.

I once again appeal to you to bail me out by responding to the questionnaire. You may also wish to know that since I have already exhausted University research funds, the exercise is proving very costly since I have to use my personal money. I hope you will take this into consideration and assist me in this research project.

Yours sincerely

C M CHAMA

Exhibit 5A5.14 Overseas graduates' re-forwarding letter

THE UNIVERSITY OF ZAMBIA
(NDOLA CAMPUS)
SCHOOL OF BUSINESS AND INDUSTRIAL STUDIES
P.O. Box 21692 - KITWE - ZAMBIA

Telephone: 210841/215526

Telegrams: Unzando Kitwe

Your Reference:
Our Reference:

12th November, 1986

Dear

Re: CAREER PLANS AND EXPERIENCES AMONG SBIS GRADUATES SELF-ADMINISTERED QUESTIONNAIRE

I had sent a questionnaire for completion and returning by 10th October, 1986, using your address in Zambia. But I have received information indicating that you are away for studies.

However, since you cannot be substituted, I would still appreciate if you would find some time to assist me.

As you are abroad for your studies and considering that I do not have enough time to wait for your completed questionnaire, I would appreciate if you would kindly complete the questionnaire and send it to me at the following address by 15th December 1986:

Mr C M Chama
Department of Business and Management
University of Stirling
Stirling FK9 4LA
SCTOLAND

Yours sincerely

C M CHAMA

Exhibit 5A5.15 Overseas graduates' reminder apppeal letter

UNIVERSITY OF STIRLING
STIRLING FK9 4LA SCOTLAND

Telephone: (0786) 73171
Telex: 777557 STUNIV G
Fax No. 0786 63000 International +44 786 63000

Department of Business & Management
Head of Department: Professor T. Cannon

Mr. Clement Hikachila
13 Folkestone Road
Walthamstow Central
London E 17 9 SP

re: FINAL APPEAL TO CAREER PLANS AND EXPERIENCES AMONG SBIS GRADUATES SELF-ADMINISTERED QUESTIONNAIRE

I am kindly making a personnal final appeal to you Mr. Hikachila to respond to the above questionnaire. It is long over due, but since I can not ignore your response, due to the nature of the study I am carrying out, I am respectifully, but earnestly making a final appeal to you to help me, as urgently as you possibly can.

Please kindly respond by 15th of April, 1987. In case you get the questionnaire after that date, I would still appreciate very much if you would please respond.

On 26th September, 1986, I had sent you a questionnaire for completion and returning by 10th October, 1986, using the address that you left with UNZAMDO on graduation. But your mail was returned. I later received information through round about means that you were studying abroad. It was at that point that I redirected the mail to your present address. It is very likely that you would have liked to help me, but since the mail may have been received in the busy Month of December, you may not have had the opportunity to assist me, as you may have had other pressing matters competing for your precious time.

As I was in desparate need of your information, as still I am, I sent you a self addressed stamped questionnaire appealing to you to help me, on 7th Feb., 1987, asking you to return it by 20th.

I am definite that you would still have wanted to help me. But you were still very busy with your academic work that you were unable to return it. It is also possible that you may have received both questionnaires after the deadline, and thought it was too late to respond.

It is in that respect that I have decided to kindly plead with you to help me NOW.

I remain waiting for your response as soon as it most convenient to you. But please consider that it is over seven Months since I started the field work. I am already analysing it. But I can still squeese it in if you help me.

Yours Sincerely,

Christopher M. Chama.

Exhibit SA5.16 Overseas Graduates' appeal letter for contact addresses

P/S

Please kindly let me have the addresses of the following ex-UNZANDO graduates who are now in the U.K. if you know their addresses:

Banda K. Morgan

Kombe Richard

Mwale Angelo

Mwale Austin

Mweene Victor

Chitalu Valentine

Mutambo Stephen

Exhibit 5A5.17 Overseas graduates' response for contact addresses

P/S

Please kindly let me have the addresses of the following ex-UNZAMDO graduates who are now in the U.K. if you know their addresses:

Banda K. Morgen — Has gone back to Zambia

Kombe Richard 22 Fenton House, Achilles Street
Mwale Angelo New Cross, London SE14 6BD

Mwale Austin ~~no longer in the UK~~ — Back to to Zambia

Mwesne Victor —

Chitalu Valentine

Mutambo Stephen

Other ex-UNZAMDO graduates now in the UK are

1. FELIX MUTATI
136 PENROSE STREET
KENNINGTON, SE17

2 W. Kapembwa — address as Richard Kombe above

3. KATEBE CHOLA / Eustake Bobo (both stay at same place)
74 East Churchfield road
Acton, London W3 7LL

4 Fidelis Chola
8 Gage Road, Canningtown
London E16 2PP

5 Charles Sitenge
157 WIGAN HOUSE
WARWICK GROVE
Upper Clapton
LONDON E5

I did not get an other questionare from you, apart from the one I posted yesterday

I hope the address I have provided will be of some help to you

B. M.

Exhibit 5A5.18 Businessmen's introductory letter

P.1

School of Business and Industrial Studies
University of Zambia
P.O. Box 21692
KITWE

The Managing Director

5th August 1986

Mr. K.R. SCHACHT
HOKONA INTERNATIONAL (Z) LTD
BOX 22298

Dear Sir

RE: ENTREPRENEURIAL FORMATION PROCESS AND GOVERNMENT POLICY

I am requesting for an appointment to administer a questionnaire to you regarding your firm on the above subject matter at your earliest convenient date and time.

I am a Lecturer at the University of Zambia's School of Business and Industrial Studies (SBIS), currently studying at the University of Stirling, Department of Business and Management in Scotland. I am conducting a comparative research study between small and large firms regarding the Zambian government's policy and support towards and the process of entrepreneurial formation in Zambia.

The research study is being sponsored by the University of Zambia and is fully supported by the Small Industries Development organisation (SIDO). It is also endorsed by the Universitty of Stirling's Department of Business and Management.

Your firm has been specially randomly selected to provide some valuable information through a scheduled personal questionnarie interview.

Great importance is attached to the information that you will provide for three reasons. First the results of the research study will be very useful to help Government in determining policies towards business firms. You need not be reminded of the present importance the government now attaches to business firms, particularly the Small-scale business. The Prime Minister had recently indicated that the Small scale sector had been given "the second highest priority rating after agriculture because of its crucial role" (Time of Zambia, July 29, 1986 P.1).

2/.....

5th August 1986

The Managing Director

Second, the results will also help businessmen in getting necessary assistance from the Government and/or private or international agencies. Third the University of Zambia will also benefit in deciding on p priorities in designing courses that will be useful in encouranging graduates to start their own businesses later.

It is in this respect that I am kindly asking you to participate in this important study. Please either ring me at Tel..... or write to me at the School of Business and Industrial Studies, University of Zambia P.O. Box 21692, Kitwe to let me know when you would be available for an interview. Office Tel. 215526, 215155 Home Tel. 216358.

I would appreciate very much if you would give me a favourable reply as it is not possible to substitute your firm with another one due to statistical sampling requirements.

Yours faithfully

C.M. Chama

Exhibit 5A5.19 Businessmen's advance appeal letter for providing employment and financial data

University of Zambia
Ndola Campus
School of Business & Industrial Studies
P O Box 21692
KITWE

Dear Sir,

I would appreciate very much if you would kindly provide the required information on page 5, enclosed before we formally meet for a personal interview. The reason is that it may be necessary to refer to your files before supplying the necessary information.

Thank you very much in advance for your anticipated cooperation.

Yours faithfully,

F. M. Chama

AMA, SMALL BUSINESSMEN QUESTIONNAIRE

15. Have you ever applied for a business loan?
a. No [ ]
b. Yes [ ]
IF YES, SKIP TO Q.18
OTHERWISE CONTINUE

16. IF NO, would you LIKE to apply for a BUSINESS loan?
a. No [ ]
b. Yes [ ]
If YES, SKIP TO Q.21
OTHERWISE CONTINUE

17. If you have NOT APPLIED or would NOT LIKE to apply for a business loan, what is the most important reason?
a. Do not like debits [ ]
b. No point since would not qualify [ ]
c. Too high interest [ ]
d. Not aware of where to apply to [ ]
e. Other: Specify _____

SKIP TO Q.21

18. If you have APPLIED for a BUSINESS loan, to which organisations?
a. Bank [ ]
b. Government [ ]
c. Small Enter. Promotion [ ]
d. Small Industr.Dev. Organ. [ ]
e. Other: Specify _____

RECORD WHATEVER RESPONDENT STATES.

19. If you have ever APPLIED, how many times have you been successful?
No. of Times.....

20. How much were you given at the first and the last times if you can remember
a. First time £_____
b. Last time £_____

T. FIRM SIZE, LONGITUDINAL EMPLOYMENT CREATION CAPACITY AND PROSPECTS

21. What is the total number of managers in this firm?
No. of managers_____

A MANAGER IN THIS CASE REFERS TO ANY PERSON WHO IS IN CHARGE OF A GROUP OF PEOPLE, INCLUDING SUPERVISORS.

22. How many Managers are responsible to the chief executive?
No. of managers_____

23. Total number of employees in ALL YOUR business FIRMS in 1985 (Jan. - Dec.) (include owner)
a. Full time (excl family) _____
b. Full time family members _____
c. Part time (half day) _____

Total _____

24. Total initial number of employees in this organisation when it started operating (Not necessarily when registered)
a. Full time (excl. family) _____
b. Family members _____
c. Part time (half day) _____

Total _____

Q14a 35
Q14b 36-37
Q14c 38-42
Q19 47-48
Q20a 49-53
Q20b 54-58
Q21 59-60
Q15 43
Q22 61-62
Q16 44
Q23a 63-67
Q23b 68-72
Q23c 73-74
Q23d 75-79
Q17 45
Q24a 11
Q24b 12-16
Q24c 17-18
Q24d 19-23
Q18 46

CHAMA, SMALL BUSINESSMEN QUESTIONNAIRE

25. Total number of employees in THIS business firm in the following years indicated
IF FIRM HAD NOT YET BEEN FORMED IN EARLIER YEARS, MARK THE NOT YET FORMED COLUMN.

ASSURE RESPONDENTS OF STRICT CONFIDENTIALITY AND ANONYMITY

(Jan. - Dec.) (include owner)

	Full time	Family members	Part time	Total	Not formed
a.1985					
b.1990					
c.1995					
d.1980					
e.1982					
f.1983					
g.1984					
h.1985					

26. Please kindly provide us with some information on the performance of your firm.

	Total fixed assets	Gross/ Total sales	Gross/ Total profit	Net Profit
'85				

27. What is the additional number of employees if you anticipate the labour force to increase by Dec. 1986?
a. No. of employees [ ]
b. No increase [ ]

28. What is the additional number of employees if you anticipate the labour force to increase by Dec. 1987?
a. No. of employees [ ]
b. No increase expected [ ]

025a 25-
025b 30-4
025c 50-6
025d 65-7
025e 19
025f 20-32
025g 33-45
025h 46-58
026 59-63
64-68
69-73
74-78
#4
027a 07-08
027b 09
028a 10-11
028b 12

Exhibit 5A5.21 Dean's introductory letter to businessmen

THE UNIVERSITY OF ZAMBIA
(NDOLA CAMPUS)
SCHOOL OF BUSINESS AND INDUSTRIAL STUDIES

P.O. Box 21692 - KITWE - ZAMBIA

Telephone: 210841/215526

Telegrams: Unzando
Kitwe

Your Reference:
Our Reference:

Dear Sir/Madam

I write to introduce Mr Christopher Chama and to solicit for your cooperation in the project on small scale industries which Mr Chama is undertaking.

Mr Chama is a lecturer in management at the School of Business and Industrial Studies, UNZANDO, but is currently on leave of absence while pursuing doctoral Studies at the University of Stirling. He is now doing research for his doctoral studies, and his field of interest is small scale industries in Zambia.

The University of Zambia is funding this research project and it is envisaged that the information to be generated through your participation will be useful in three ways: First, it will be useful to SIDO in designing more effective programmes toward promoting the development of small-scale industries. Second, it will help the government in the development of such national policies as will facilitate the growth of business enterprise. Third, it will assist the University of Zambia in designing courses which will encourage students to take up the challenge of entrepreneurship or work in small firms.

It would be greatly appreciated if you could assist Mr Chama, and I wish to thank you in anticipation of your cooperation.

Yours sincerely

J M TEMBO (DR)
DEAN - SCHOOL OF BUSINESS AND IND. STUDIES

Exhibit DAS.22 Staff Development Office introductory ... authorising conducting interview

THE UNIVERSITY OF ZAMBIA

OFFICE OF THE VICE-CHANCELLOR
P.O. Box 31238. LUSAKA. ZAMBIA

Your References:
Our References:

Telephone: 213221
Telegrams: UNZA, LUSAKA
Telex: UNZALU 44370

25th July 1986

TO WHOM IT MAY CONCERN

RE: MR M.C. CHAMA

The above mentioned is a member of Staff of the University of Zambia in the School of Business and Industrial Studies, Ndola Campus.

Mr. Chama is on study leave to pursue Ph.D studies at the University of Stirling, Scotland, and he is currently in Zambia to conduct fieldwork for his Ph.D Research Proposal entitled: Small Scale Business in Zambia: Their Definition, Government, Interpreneurial Formation and Performance of the Manufacturing Sector."

Mr. Chama will require to refer to your files and records for most of his research and we shall appreciate your kind assistance in granting him access to the avalaible materials in your possession.

Yours faithfully

R.M. Chiyamika
STAFF DEVELOPMENT OFFICER

STAFF DEVELOPMENT OFFICER

/jmb.

Exhibit 5A5.23 Lusaka Urban District Council authority letter to conduct research

Lusaka Urban District Council

OFFICE OF ADM. SEC.

Telegrams "CITY"
Telephone: 218888

Administration Dept.
CIVIC CENTRE
Independence Ave.
P.O. Box 30077
LUSAKA
Republic of Zambia

Reference: TDN/JRM
DES/7/59/1

Your Ref.:

7th August, 1986

TO WHOM IT MAY CONCERN

RESEARCH PROGRAMME:- MR. C.M. CHAMA STAFF
- UNIVERSITY OF ZAMBIA

I refer to the letter addressed to the District Governor wherein permission is being sought by the University of Zambia to enable Mr. C.M. Chama conduct his research Programme.

I write to authorise Mr. Chama carryout this Programme in the Lusaka Urban District Council.

I accordingly request all the Parties to whom this programme will refer, to offer Mr. Chama all the assistance he requires.

T.D. NSENJE
for/DISTRICT EXECUTIVE SECRETARY

cc. The District Governor

cc. Mr. R.A. Chisanika,
Staff Development Officer,
LUSAKA.

Exhibit 5A5.24 Ndola Urban District Council authority letter to conduct research

Ndola Urban District Council

CHISHALA M. CHITOSHI
LL.B. (Zambia) LL.M. Ph.D. (Lond)
FELGA, ACIS, ADVOCATE
District Executive Secretary
Telephone: 6281
Telex: ZA 30270

All Communications to be addressed to The District Executive Secretary

DISTRICT EXECUTIVE SECRETARY
P.O. Box 70197
NDOLA
ZAMBIA

Your Reference:

My Reference: SCK/5461

14th August, 1986.

TO WHOM IT MAY CONCERN

The bearer is Mr. C.M. Chama, a Lecturer at the University of Zambia's School of Business and Industrial Studies. He is presently studying at the University of Stirling, Department of Business and Management in Scotland.

Mr. Chama is currently sponsored by the University of Zambia to carry out a comparative research study between small and large firms regarding the Zambian Governments Policy and support towards and the process of entrepreneurial formation in Zambia and has chosen Ndola for his research.

The purpose of this introductory note is to request all business concerns that might be approached to accord him maximum support to accomplish his task.

S.C. KALESA
for/ DISTRICT EXECUTIVE SECRETARY

c.c. Officer Commanding
Zambia Police
Ndola District.

5A5.25 Kitwe Urban District Council authority letter to conduct research

In reply please quote No. DC/1/86/BC

REPUBLIC OF ZAMBIA

OFFICE OF THE DISTRICT GOVERNOR
KITWE DISTRICT
P.O. BOX 20070
KITWE

18th August, 1986

TO WHOM IT MAY CONCERN

RE: SMALL SCALE BUSINESS IN ZAMBIA: GOVERNMENT POLICY, ENTREPRENEURIAL FORMATION AND PERFORMANCE OF SMALL SCALE BUSINESSES

The bearer of this letter, Mr. C.M. Chama, is a lecturer at the University of Zambia, Lusaka, and is conducting a research study here in Kitwe on the above-mentioned subject.

Your kind assitance on the matter will be highly appreciated.

Yours in the National Service,

BILL CHANDA
DISTRICT GOVERNOR

/cmm

Exhibit 5A5.26 Businessmen's letter on postal delays

Head Office and Administration
Buteko House
Buteko Avenue
P.O. Box 71470
NDOLA Telephone

ZATALI

ZANIMUWONE TAILORS LIMITED

Factory and Distribution Centre
(Next to Foam Plastics Limited)
Accra Road
P.O. Box 28008
KITWE Telephone

Your Ref:

Our Ref: ZAT 002

Dear Mr Chama,

RE: SMALL BUSINESS QUESTIONNAIRE

Please find herewith enclosed the small scale business Questionaire endorsed.

We are requesting you to bear with us for our late reply. This has been due to the fact that we recieved the questionaire late — it had been sent to a wrong adress (Kalulu — shi) before we ~~recied~~ recieved its through our land Lords a couple of weeks ago.

We shall nevertheless remain open for discussion at any time (during our working house).

Yours sincerely,

Returned enclosure fully completed

SECRETARY/ACCOUNTANT
(FOR ZANIMUWONE TAILORS).

ZANIMUWONE TAILORS LTD
17 SEP 1986

1072

CHAPTER 6 TECHNICAL APPENDIX 6A1 - EMPIRICAL FINDINGS ON URBAN POPULATION CONCENTRATION

6A1.1 INTRODUCTION

The main hypothesis that small firms do not create significant job opportunities compared to large firms and the corresponding objective of ascertaining the employment level of small firms necessitated examination of urban population concentration. There were two reasons for such an interest. The first was to look at the tendencies of people to emigrate from rural to urban areas. The second was to learn about tendencies to permanently stay in town - immigration patterns.

Findings from such an analysis were expected to help in judging whether urban concentration can be expected to increase or decline. The outcome was seen to be useful in two ways. First, the results would help in understanding the likely effects on the job market situation in Zambian urban areas. Second, it would disclose the degree of response to the president's call of going back to the land (rural areas) in order to reduce the urban unemployment pressures instead of permanently staying in urban areas.

In order to study urban concentration tendencies, students', graduates' and their parental living habits were used in studying the issue of urban concentration. That is birth places (rural or urban), their present residential areas and their tendencies towards immigrating to urban areas were examined.

Results of emigration and immigration patterns indicated that a very large proportion of about 9 out of 10 students' and graduates' parents were born in rural areas. Further a good proportion of 2 out of 5 people had stayed most of the time in urban areas. The majority of 8 out of 10 people "now" staying on the copperbelt and Lusaka were immigrants from rural areas.

This tendency of staying in urban areas by students' and graduates' parents was equally applicable to their own children. The concentration was expected to be worse since about 1 out of 2 of these offsprings were actually born in urban areas in large families. The average size of a family, for example, was about 5 children in the case of students. The greatest majority of at least 8 out of 10 were now living in urban areas.

After presenting hypotheses for testing emigration and immigration patterns, the former will be picked up for analysis before the latter.

6A1.2 EMIGRATION AND IMMIGRATION PATTERNS

In order to correctly analyse patterns to permanently remain in the urban areas, there was a need to formulate hypotheses dealing with the issue and then test them. Three main hypotheses with their own sub - hypotheses were made. The first main one dealt with students' and graduates' tendencies to select urban areas for their residential homes. The second one tested their parents' tendencies to emigrate to urban areas. The third hypothesis was intended to measure the level of students' and graduates' patterns to permanently remain in urban areas.

The first hypothesis was that students and graduates tended to select urban areas as their residential areas during their working period regardless of their place of birth or their parents' place of birth. The appropriate null and alternative hypotheses to test this were:

Hypothesis 1:

H_0: Students' or graduates' residential areas and their place of birth are independent.

H_1: Selection of residential areas by students or graduates is influenced by their own place of birth or area parents have stayed in most of their time.

H_0: Selection of residential areas by students or graduates depends on the parents' place of birth.

H_1: Selection of residential areas by students or graduates depends on the parents' place of birth.

$\alpha = 0.05$ Significance level for testing the hypotheses

The second hypothesis was that people who were born in rural areas but migrated to town centres tended to live there for good instead of going back to their villages. The relevant null and alternative hypotheses to test immigration patterns of students' and graduates' parents were therefore:

hypothesis 2:

H_0: Null hypothesis: Among students' and graduates' parents who were born in rural areas, there are no differences in selecting their permanent homes between those who emigrated and those who remained in villages.

H_1: Alternative hypothesis: There are differences between immigrants and villagers in selecting a permanent home. In particular there is a tendency for those who have stayed very long in town to permanently remain there.

α = 0.05 <--- Significance level for testing the hypothesis.

The third hypothesis was that the young generation (students and graduates) tended to select urban areas as their permanent homes regardless of their birth place or that of their parents. The necessary null and alternative hypotheses were:

Hypothesis 3:

H_0: Selection of permanent home by students or graduates is independent of parents' place of residence.

H_1: Selection of permanent home by students or graduates depends on parents' place of residence.

H_0: Selection of permanent home by students or graduates is not related to parents place of birth.

H_1: Selection of permanent home by students or graduates depends on parents' place of birth.

α = 0.05 significance level for testing hypothesis.

6A1.2.1 MIGRATION PATTERNS

6A1.2.1.1 PLACE PARENTS HAVE STAYED AT MOST

Both students and graduates were asked to indicate where their parents were born and where they had lived most of their time. The provinces indicated were then collapsed into rural and urban categories. Leaving out foreigners and non respondents, the greatest majority of students' fathers of 93% (142 out of 153) were born in rural areas, basically Eastern (23%), Northern (19%), Western (14%), Southern (14%) and Luapula (11%) provinces. Thus only 7% were born in urban areas. As regards students' mothers 86% were born in rural areas mainly in Eastern (19%), Northern (18%), Southern (17%) and Luapula 12%).

A similar pattern was found for graduates' fathers whom 87% were born in rural areas mainly Northern (21%), Southern (17%) Eastern (17%), Luapula (11%) and Western 11%) provinces. The percentage of their mothers' who were born in the rural areas was 85%. The main areas were Northern (21%), Southern (17%), Western (10%) Eastern (13%) and Luapula (10%) provinces.

Comparison of place where students' father had lived most and where he was born showed that out of all respondents, a total proportion of 57% had stayed in rural areas while 43% had stayed most in urban areas. Out of the 93% who were born in rural areas, a very high proportion of 61% were found to have lived most of their time in the rural areas. Thus about 39% had spent most their time in urban areas. This revealed a migration rate of about 2 out of 5 persons. All of those who were born in urban

areas, had spent most of their time in urban areas. These differences between those who were born in rural versus urban areas were statistically significant at 0.000 (see table 8A1.1).

Table 6A1.1 PLACE STUDENT'S FATHER HAS LIVED MOST BY PLACE STUDENT'S FATHER HAS BORN

STUDENT'S FATHER'S PLACE LIVED MOST	STUDENT'S FATHER'S PLACE OF BIRTH: RURAL	URBAN	Total
	No. / Row % / Col. %	No. / Row % / Col. %	No. / Row %
RURAL	87 / 100.0 / 61.3		87 / 56.9
URBAN	55 / 83.3 / 38.7	11 / 16.7 / 100.0	66 / 43.1
Column Total No.	142	11	153
Column Total %	92.8	7.2	100.0

I^2 = 13, P = 0.0003, Phi = 0.32, No. Missing = 28

Table 6A1.2 PLACE GRADUATE'S FATHER HAS LIVED MOST BY PLACE GRADUATE'S FATHER FATHER HAS BORN

GRADUATE'S FATHER'S PLACE LIVED MOST	GRADUATE'S FATHER'S PLACE OF BIRTH: RURAL	URBAN	Total
	No. / Row % / Col. %	No. / Row % / Col. %	No. / Row %
RURAL	133 / 100.0 / 70.3		133 / 61.1
URBAN	57 / 66.3 / 29.7	29 / 33.7 / 100.0	86 / 38.9
Column Total No.	192	29	221
Column Total %	86.9	13.1	100.0

I^2 = 49, P = 0.0000, Phi = 0.49, No. Missing = 33

Key for Abbreviations (used through out the appendices):

No.	= Number of observations in a cell
Row %	= Row percent in a cell
Col. %	= Column percent in a cell
Min. E.F.	= Minimum expected frequency
X^2	= Calculated chi-square value
P = Significance	= Significance level or prob value for Chi-square test
Cells with E.F.< 5	= Cells with expected frequency less than 5
Phi Statistic Value	= Phi correlation coefficient
Cramers V	= Cramers correlation coefficient
No. Missing	= Number of cases without valid data (for no response) and excluded from calculations

The same picture was obtained for graduates' fathers. Out of all respondents a total proportion of 61% had lived most of their time in rural areas and 39% had stayed mostly in urban areas. But the greatest proportion of 70% who were born in rural areas had stayed mostly in rural areas but 30% had stayed mostly in urban areas. This therefore showed a migration rate of 3 out of 10. As in the case of students, all of those who were born in urban areas had lived most of their time in urban areas. The differences between those who were born in town and rural areas were significant at 0.0000 (see table 6A1.2).

Almost the same stories were obtained for students' mothers. Out of the total, about 41% had spent most of their time in urban areas. But about 35% of mothers who were born in rural areas had emigrated to urban areas where they spent most of their time. Mothers were however different from fathers as a small proportion of 17% of those who were born in urban areas tended to spend most their time in rural areas. The differences were significant at 0.0002.

A similar pattern of more people staying in rural areas than in town was obtained for graduates' mothers whose proportions were 64% and 36%. But only 25% of mothers born in rural areas had stayed most in urban areas. Almost all (97%) of mothers born in urban areas stayed there.

The findings therefore revealed that on the whole, about 2 out of 5 people who were born in rural areas had stayed most of their time in urban areas. Most people had spent most of their lives in rural areas.

6A1.2.1.2 STUDENTS' AND GRADUATES RESIDENTIAL HOME

In order to test hypothesis 1 relating to students tendencies to live in urban areas and graduates' developing habits of working in urban areas, both were asked to indicate their place of birth and residential home.

The findings indicated that 46% of students, aged between 18 and 43 were born in urban areas while 54% were born in rural areas. This sharply contrasted with their own parents' birth place, most of whom (93%) were born in rural areas. In the case of graduates, 42% now aged between 21 and 33, were born in town while 58% were born in rural areas. This again was contrary to their parents' situation whom 87% were born rural areas. Thus while 1 out of 10 among the older generation was born in town, the gap was narrower for the younger generation since their rate was almost 1 out of 2 being born in urban areas.

When it came to residential areas, the contrast was sharpest since 78% and 89% of all students and graduates respectively indicated urban areas as their residential homes. It will be recalled that these proportions were 47% and 39% in the case of their parents.

There were however differences in selecting a residential home between students born in rural and urban areas. About 35% of students born in rural areas selected rural area as their residential home compared to 65% who selected urban areas. But these were 5% and 95% for those born in urban areas. These differences were significant at 0.0000 (see table 6A1.3). But this was not the case among graduates where 12% and 88% were

living in rural areas and urban areas respectively for those born in rural areas. About the same percentages of 11% and 90% were staying in rural and urban among those born in urban areas. The significance level was 0.9, indicating that the two groups were almost the same (see table 6A1.4). Phi coefficient of correlation was 0.4 and 0.02 for students and graduates respectively.

The interpretation was that among students, those who were born in town were different from those who were born in villages in selecting their residential places. Both groups tended to choose urban areas. But almost all of those who were born in town tended to choose urban areas. This implied that in the case students, place of birth played some role in selecting a residential area although more chose urban areas. In other words choosing a residential area for students was influenced by student's place of birth. Therefore the two were not independent. However among graduates, those who were born in rural and urban areas were similar in opting for a residential area, mostly urban areas. There was no strong relationship between the two. This therefore meant that although the two groups were similar, choosing a residential area was not dependent on the graduate's birth place. This was so because the variation explained by the correlation coefficient was very low.

Table 6A1.3 STUDENT'S RESIDENTIAL HOME BY STUDENT'S PROVINCE BIRTH PLACE

STUDENT'S RESIDENTIAL HOME	STUDENT'S PLACE OF BIRTH		
	RURAL	URBAN	
	No.	No.	Total
	Row %	Row %	No.
	Col. %	Col. %	Row %
RURAL	34	4	38
	89.5	10.5	21.5
	35.4	4.9	
URBAN	62	77	139
	44.6	55.4	78.5
	64.6	95.1	
Column Total No.	96	81	177
Column Total %	54.2	45.8	100.0

I^2 = 22, P = 0.0000, Phi = 0.37, No. Missing = 4

Table 6A1.4 GRADUATE'S RESIDENTIAL HOME BY GRADUATE'S PROVINCE BIRTH PLACE

GRADUATE'S RESIDENTIAL HOME	GRADUATE'S PLACE OF BIRTH		
	RURAL	URBAN	
	No.	No.	Total
	Row %	Row %	No.
	Col. %	Col. %	Row %
RURAL	17	11	28
	60.7	39.3	11.3
	12.0	10.5	
URBAN	125	94	219
	57.1	42.9	88.7
	88.0	89.5	
Column Total No.	142	105	247
Column Total %	57.5	42.5	100.0

I^2 = .03, P = 0.8701, Phi = 0.02, No. Missing = 7

This notion that students and graduates who were born in rural areas had a strong inclination to live in urban areas instead of their villages was supported by another finding that a respondent's permanent home did not have great influence in selecting a residential home. Replies on what the respondents regarded as their permanent home were compared to the place where they were staying.

A great proportion of 85% of students indicated rural areas as their permanent homes compared to 15% who chose urban. But a great proportion of 59% whose permanent home was a rural area were still living in urban areas. Thus only 41% were living in rural areas. Almost all (93%) of those whose permanent home was in urban areas were living there. It is clear that despite the tendency of the former group (with rural as a permanent home) to

live in town, the two groups were different. The differences between the two groups were statistically large enough at 0.0340 (see table 8A1.5). Hence it can also be seen that being born in a rural area was not a guarantee to selecting a rural area as a residential home. But identification and integration with urban dwellers on a permanent bases was a factor in determining one's home as an urban area.

This tendency of staying in town by those who were born in rural area was more conspicuous in the case of graduates. A great majority of 77% referred to rural areas as their permanent homes compared to 23% who opted for urban areas. Yet a very great proportion of 84% of the former were staying in urban areas while all (100%) of the later were doing so. These marked differences were significant at 0.0336 with phi equal to 0.2 (see table 8A1.6). In the case of those who were born in the urban areas, what they considered as their permanent home equally influenced their choice of a residential home. Those who chose urban or rural areas as their permanent home were not different in selecting a residential. The majority of 100% and 91% for the former and later chose urban areas in the case of students and 83% and 95% in the case of graduates. The differences in both cases were not statistically significant. This indicated that for those who were born in urban areas, those who referred to rural area as their permanent home were similar to those who chose the urban areas in their habits of living in urban areas.

The implication of these findings was that people who were born in town had virtually become integrated into the urban life. Consequently references to ancestor's homes by some was immaterial as their strong preferences for living in town did not

distinguish them from those who in essence opted for urban areas as their permanent home. Thus the two groups were the same. If this was the case this would implicitly point to an eventual fusing of the two groups. Hence even those who referred to rural areas as their permanent home would not in fact return there once assimilation in urban area has taken place.

Findings relating to parents having been born in urban areas when analysed produced the same conclusions as in the case of their offsprings having been born there.

Table 6A1.5 TYPE OF STUDENT'S RESIDENTIAL HOME BY TYPE OF STUDENT'S PERMANENT HOME CONTROLLING FOR..STUDENT'S BIRTH PLACE - FOR RURAL AREA

STUDENT'S RESIDENTIAL HOME	STUDENT'S PERMANENT HOME		
	RURAL	URBAN	
	No.	No.	Total
	Row %	Row %	No.
	Col. %	Col. %	Row %
RURAL	33	1	34
	97.1	2.9	35.8
	40.7	7.1	
URBAN	48	13	61
	78.7	21.3	64.2
	59.3	92.9	
Column Total No.	81	14	95
Column Total %	85.3	14.7	100.0

$I^2 = 4$, $P = 0.0340$, Phi = 0.25

Table 6A1.6 TYPE OF GRADUATE'S RESIDENTIAL HOME BY TYPE OF GRADUATE'S PERMANENT HOME CONTROLLING FOR..TYPE OF GRADUATE'S BIRTH PLACE - RURAL AREA

GRADUATE'S RESIDENTIAL HOME	GRADUATE'S PERMANENT HOME		
	RURAL	URBAN	
	No.	No.	Total
	Row %	Row %	No.
	Col. %	Col. %	Row %
RURAL	17		17
	100.0		12.1
	15.7		
URBAN	91	33	124
	73.4	26.6	87.9
	84.3	100.0	
Column Total No.	108	33	141
Column Total %	76.6	23.4	100.0

$I^2 = 9$, $P = 0.0336$, Phi = 0.20

In addition to investigating respondent's and parents place of birth, the place where parents lived most was examined to see whether it affected selection of a respondent's residential area.

On the whole, the place where parents lived most was found to have influence among students in selecting a residential home. About 96% of students whose fathers had stayed most in urban areas chose urban area as their residential homes. The proportion was 63% for students whose fathers had stayed most in rural areas. The two groups were different at a significant level of 0.0000 (see table 6A1.7).

Table 6A1.7 TYPE OF STUDENT'S RESIDENTIAL HOME BY PLACE STUDENT'S FATHER HAS LIVED MOST

STUDENT'S RESIDENTIAL HOME	STUDENT'S FATHER'S PLACE LIVED MOST		
	RURAL No. Row % Col. %	URBAN No. Row % Col. %	Total No. Row %
RURAL	34 91.9 37.0	3 8.1 4.1	37 22.3
URBAN	58 45.0 63.0	71 55.0 95.9	129 77.7
Column Total No. Column Total %	92 55.4	74 44.6	166 100.0

I^2 = 24, P = 0.0000, Phi = 0.39, No. Missing = 15

Table 6A1.8 TYPE OF GRAD'S RESIDENTIAL HOME BY PROVINCE GRAD'S FATHER HAS LIVED MOST

GRADUATE'S RESIDENTIAL HOME	GRADUATE'S FATHER'S PLACE LIVED MOST		
	RURAL No. Row % Col. %	URBAN No. Row % Col. %	Total No. Row %
RURAL	19 73.1 14.2	7 26.9 7.2	26 11.3
URBAN	115 56.1 85.8	90 43.9 92.8	205 88.7
Column Total No. Column Total %	134 58.0	97 42.0	231 100.0

I^2 = 2, P = 0.1494, Phi = 0.11, No. Missing = 23

A different story was obtained in the case of graduates. There was no difference in selecting a residential area between those whose fathers had stayed most in rural or urban as the proportions were 86% and 93% respectively among those who chose the urban areas. These differences were not statistically significant. The phi correlation coefficient was 0.1 (see table 6A1.8). This lack of difference could reflect their becoming independent of their parents when settling down and establishing

their own families in their preferred areas. Most students stayed with their parents wherever they were living.

The conclusion was that students' residential homes also depended on where the parents had stayed most of the time. But they were independent in the case of graduates since place where parents lived most explained only a very small variation and the two groups were not different.

The place where parents were living at the time of the study was not necessarily the student's residential home, particularly among students whose parents were living in rural areas. But for those whose parents were living in urban areas, it was one and the same place. About 99% of students whose parents were living in urban areas also referred to urban area as their residential home. But 58% of students whose parents were living in rural area referred to urban areas as their residential homes. These differences were significant at 0.0000 and phi was 0.5 (see table 6A1.9). The interpretation was that almost all of the students whose parents were staying in town referred to urban area as their home. But a great proportion of students whose parents were living in villages still considered urban areas as their residential areas. This further confirmed the tendencies for a greater population to stay in town.

The results for graduates were slightly different. On the whole, 9 out of 10 of all respondents considered urban area as their residential place. There were no significant differences between those whose fathers were now living in rural areas and

town. The proportions were 88% and 93% respectively among those who chose urban area as their residential area (see table 6A1.10). This again reflected their becoming self-reliant in determining their destiny compared to students. But in both cases, there was a tendency for both to stay in town.

Table 6A1.9 TYPE OF STUDENT'S RESIDENTIAL HOME BY TYPE OF PLACE STUD'S FATHER LIVES NOW

STUDENT'S RESIDENTIAL HOME	PLACE STUDENT'S FATHER LIVES NOW: RURAL	URBAN	Total
	No. / Row % / Col. %	No. / Row % / Col. %	No. / Row %
RURAL	30 / 96.8 / 42.3	1 / 3.2 / 1.3	31 / 21.2
URBAN	41 / 35.7 / 57.7	74 / 64.3 / 98.7	115 / 78.8
Column Total No.	71	75	146
Column Total %	48.6	51.4	100.0

I^2 = 34, P = 0.0000, Phi = 0.50, No. Missing = 35

Table 6A1.10 TYPE OF GRAD'S RESIDENTIAL HOME BY PROVINCE GRAD'S FATHER LIVES NOW

GRADUATE'S RESIDENTIAL HOME	PLACE GRADUATE'S FATHER LIVES NOW: RURAL	URBAN	Total
	No. / Row % / Col. %	No. / Row % / Col. %	No. / Row %
RURAL	12 / 70.6 / 11.7	5 / 29.4 / 6.8	17 / 9.6
URBAN	91 / 56.9 / 88.3	69 / 43.1 / 93.2	160 / 90.4
Column Total No.	103	74	177
Column Total %	58.2	41.8	100.0

I^2 =.69, P = 0.4058, Phi = 0.08, No. Missing = 77

This was confirmed by another finding that although the place where father was living "now" had an important bearing on students' residential area, the place where he had lived most of the time had little bearing on students' residential place, when the place the father was living now was made constant. This was true for those whose parents were living in rural areas or urban areas. Among those whose parents were now living in rural areas, there was no statistical difference between those whose parents had stayed most in urban areas and those who had stayed most in

rural areas in selecting residential area. But more students whose fathers had stayed most in town were living in town (83%) compared to those who had stayed most in rural areas (51%). This was also true when parents who were now staying in town were considered separately. There was no statistical difference in choosing a residential area between those whose parents had stayed most of the time in rural or urban areas. The significance level was 1.0, meaning that they were exactly the same in making their choice. About 98% of those students whose parents had stayed most in town chose the urban area as their residential home. The proportion was 100% for those whose parents had stayed most in rural areas but were now staying in urban area.

Thus it would appear that more students preferred to stay in town. But the place where the parents were staying had more influence than where they had stayed most of the time in determining where they would stay. Thus the place where parents had stayed most of the time had little bearing compared to the place where they were "now" staying.

The same conclusion was true for graduates. When rural area, where father was now living was isolated, there was no difference between graduates whose fathers had stayed most in urban or rural areas. The proportions were 94% for the former and 86% for the later, for those graduates who were living in urban areas. The same was true for graduates whose parents were now living in urban areas. But the significance level was very high at 1.0. This implied that the two groups were the same. The proportions, for example, for those who were now living in urban areas but whose parents lived most in urban and rural were 94% and 91% respectively.

6A1.2.1.3. **HYPOTHESIS TESTING**

Hypothesis 1 that students and graduates tended to select urban areas as their residential home regardless of their place of birth or their parents' place of birth was thrown out for lack of evidence since the hypothesis was double barred.

In particular the alternative sub hypotheses that selection of residential areas by students or graduates is influenced by their own place of birth or where parents have stayed most of their time could not hold water. It was true that more students who were born in rural areas selected urban areas as their residential homes. But evidence also showed that 35% chose rural areas. Therefore residential area and birth place were not independent. Further, it was true that for graduates birth place was an irrelevant factor in determining where they would stay. This agreed with the hypothesis. But the two groups - students and graduates taken together failed to satisfy the hypothesis. For the same reason, sub-hypothesis 1 (b) could not be accepted since it was false that selection of residential areas by students or graduates was independent of parents' place of birth. This was only true for graduates.

6A1.2.2. IMMIGRATION PATTERNS: TENDENCIES FOR MORE PEOPLE TO LIVE IN URBAN AREAS

6A1.2.2.1 PARENTS LIVING HABITS

6A1.2.2.1.1 Place parents Have lived most and where they were living now

Although more parents had lived most in rural areas, that gap was increasingly getting narrower as more and more people lived in urban areas. In order to gauge the concentration of urban population by the influx of rural dwellers, focus was then shifted to the composition of students' and graduates' parents who had lived most in urban areas or those who were now living there.

It has been shown in table 6A1.1 that out of the total of 66 (or 43%) of students' fathers who had stayed most in urban areas, the greatest majority of 83% were born in rural areas. There was however a difference between those who were born in rural and urban areas in their living habits. While only 39% of those who were born in rural areas had also stayed most of their time in urban areas, this was 100% for those who were born there (see table 6A1.1).

This outcome was also true for graduates' fathers. Although only 39% (66) had stayed most of their time in urban areas, the greatest majority of 66% of these 66 were born in rural areas. But these accounted for only a small proportion of 30% of all

fathers born in rural areas, who had spent most of their time in urban areas. As in the case of students, all who were born in town had spent most of their time there (see table 6A1.2). Similar patterns were found for mothers.

The tendency to close the rural-urban gap was also reflected in another question which asked students and graduates to indicate where their parents were "living now".

One puzzling finding was that although graduates were relatively young people (their ages ranging between 21 and 33 years), 69% of them still single), 81 (24%) had lost their fathers while those whose mothers' were deceased were 20 (8.4%).

Among the fathers who were still alive, findings showed that 47% and 39% of students' and graduates' fathers respectively were living in urban areas "now". Out of the 47% (63) of students' fathers, about 63% were born in rural areas. However, the proportion of all those who were born in rural areas but were staying in urban areas was 42%. This compared unfavourably with 100% of all those who were born in urban areas and were and were still lining there. The differences were statistically significant at 0.0008 (table 6A1.11)

As regards graduates' fathers, among those who were still alive 68% of the 39% (65) "now" living in urban areas were born in rural areas. Thus only 32% were born in town. However this group of fathers who were born in rural but staying in town accounted for 31% of all fathers born in rural areas. But almost all (91%) of those who were born in town were living in town (see table 6A1.12).

The finding that at least 40% of all respondents' parents (on the average) were living in urban areas was in agreement with national data. This indicated that in 1984, 43% of Zambia's population was living in urban areas (CSOL, 1984:3). Other studies have reported that the rate of those living in urban areas was estimated to surpass the 45% level by 1983 (Todd, et al. 1979:7).

Table 6A1.11 PROVINCE STUDENT'S FATHER LIVES NOW BY PROVINCE STUDENT'S FATHER WAS BORN

STUDENT'S FATHER'S PRESENT RESIDENCE	STUDENT'S FATHER'S PLACE OF BIRTH		
	RURAL	URBAN	
	No.	No.	Tota
	Row %	Row %	No.
	Col. %	Col. %	Row %
[illegible]	71		71
	100.0		53.0
	57.7		
[illegible]	52	11	63
	82.5	17.5	47.0
	42.3	100.0	
Column Total No.	123	11	134
Column Total %	91.8	8.2	100.0

I^2 = 11, P = 0.0000, Phi = 0.32, No. Missing = 47

Table 6A1.12 PROVINCE GRADUATE'S FATHER LIVES NOW BY TYPE OF PROVINCE GRAD'S FATHER WAS BORN

GRADUATE'S FATHER'S PRESENT RESIDENCE	GRADUATE'S FATHER'S PLACE OF BIRTH		
	RURAL	URBAN	
	No.	No.	Total
	Row %	Row %	No.
	Col. %	Col. %	Row. %
RURAL	100	2	102
	98.0	2.0	61.1
	69.4	8.7	
URBAN	44	21	65
	67.7	32.3	38.9
	30.6	91.3	
Column Total No.	144	23	167
Column Total %	86.2	13.8	100.0

I^2 = 28, P = 0.0000, Phi = 0.43, No. Missing = 87

In order to test hypothesis 2 that parents who migrated to urban areas tended to remain in town, all those who were born in rural areas were studied separately. Then the place where they had lived most was compared to where they were living "now" to determine whether living habits "now" were influenced by where they had lived most. That is whether there was any statistical difference between those who lived mainly in villages compared to those who spent most of their time in town.

The conclusion was that there was an inclination for each group to remain where it had lived most. A total of 42% (48 persons who were born in rural areas were "now" living in urban areas among students' fathers. Further, 73% of those who had lived most in urban areas were still living there. This meant that only 27% had gone back to villages. However, a large proportion of 79% of all those fathers who had spent most of their lives in rural areas still continued to live there. This therefore showed an emigration rate of 7 out of 10 of those who were born in rural but had spent most of their time in urban areas. These differences were statistically significant at 0.0000 (see table 6A1.13). The same result was obtained for graduates' fathers whom 31% out of the total were "now" living in urban areas. However, 69% of those who had lived most in town were still staying there. But 89% of those who had lived most in rural areas were also still residing there. These differences were significant at 0.0000 (see table 6A1.14).

It is clear that those who were born in rural areas but had lived most of the time in urban areas tended to remain town. They in fact integrated with those who were born in town such that the living habits of preferring to stay in town could not be differentiated from the later group.

This was found to be true when only those who had lived most of the time in urban areas were examined. The place where they were born was compared with the place where they were now staying to see whether there would be differences between those who were born in urban and rural areas. Findings showed that on the whole about 79% and 76% of students' and graduates' fathers,

respectively, who had spent most of their time in urban areas were still staying there. Thus only 21% and 24% respectively had returned to the villages. In addition 73% and 69% of students' and graduates' fathers, respectively, who were born in villages were "now" living in urban areas. These percentages were not statistically different from those of students' and graduates' fathers who were born in town and continued living there "now" whose proportions were 100% and 91% respectively.

Table 6A1.13 PROVINCE STUDENT'S FATHER LIVES NOW BY PLACE STUDENT'S FATHER HAS LIVED MOST CONTROLLING FOR...PLACE FATHER WAS BORN FOR : RURAL

STUDENT'S FATHER'S PRESENT RESIDENCE	STUDENT'S FATHER'S PLACE LIVED MOST		
	RURAL	URBAN	
	No.	No.	Total
	Row %	Row %	No.
	Col. %	Col. %	Row %
RURAL	55	12	67
	82.1	17.9	58.3
	78.6	26.7	
URBAN	15	33	48
	31.3	68.8	41.7
	21.4	73.3	
Column Total No.	70	45	115
Column Total %	60.9	39.1	100.0

I^2 = 28, P = 0.0000, Phi = 0.51, No. Missing = 139

Table 6A1.14 PROVINCE GRADUATE'S FATHER LIVES NOW BY PROVINCE GRADUATE'S FATHER HAS LIVED MOST CONTROLLING FOR..PROVINCE FATHER WAS BORN FOR: RURAL

GRADUATE'S FATHER'S PRESENT RESIDENCE	GRADUATE'S FATHER'S PLACE LIVED MOST		
	RURAL	URBAN	
	No.	No.	Total
	Row %	Row %	No.
	Col. %	Col. %	Row %
RURAL	82	15	97
	84.5	15.5	69.3
	89.1	31.3	
URBAN	10	33	43
	23.3	76.7	30.7
	10.9	68.8	
Column Total No.	92	48	140
Column Total %	65.7	34.3	100.0

I^2 = 47, P = 0.0000, Phi = 0.60, No. Missing = 114

A breakdown on those who had moved but had stayed for most of the time in one place was made. Then a comparison was carried out between those who moved to urban areas and those who moved back to rural areas, analysis of differences of means showed that the two groups were statistically different. For those who moved to town and stayed there most of the time an average equal period of 18 years each for students' parents and graduates' fathers',

was found. This compared unfavourably with 13 and 14 years for students and graduates for those who moved to and lived most of their time in rural areas. The F-statistics were 4 and 7 for students' parents and graduates fathers respectively. The significance levels were 0.0377 and 0.0118 for the former and the later. About 50% of all cases for those who moved were included (see table 6A1.15 and 6A1.16).

Table 6A1.15 Differences of Mean number of years, between rural and urban, for place Student's father lived most since parents moved.

DESCRIPTION OF SUBPOPULATIONS				
Criterion Variable	YEARS AGO STUDENT'S PARENTS' MOVED TO PRES			
Broken Down by	PROVINCE STUDENT'S FATHER HAS LIVED MOST			
Variable	Place	No.	Mean	Std Dev
For Entire Population		100	15	12
PLACE FATHER LIVED MOST:	RURAL	46	13	10
PLACE FATHER LIVED MOST:	URBAN	52	18	13

F = 4 P = 0.0377 No. Missing = 81 or 45%

Table 6A1.16 Differences of Mean number of years between rural and urban for place Graduate's parents lived most since moving

DESCRIPTION OF SUBPOPULATIONS				
Criterion Variable	YEARS AGO GRAD'S FATHER MOVED TO PRES. PLA			
Broken Down by	PROVINCE GRADUATE'S FATHER HAS LIVED MOST			
Variable	Place	No.	Mean	Std Dev
For Entire Population		116	18	12
PLACE FATHER HAS LIVED MOST: 1	RURAL	46	15	10
PLACE FATHER HAS LIVED MOST: 2	URBAN	70	20	13

F = 7 P = 0.0118 No. Missing = 138 or 54.3 %

Key for abreviations:

No. = No. of respondents included in analysis;
Std dev = Standard deviation ;
F = Calculated F-ratio ;
P = Sig. = F-statistic prob value

A breakdown of number of years since moving by the place they were living in "now", again revealed significant differences between those who moved to and were "now" living in urban areas with those who moved to rural areas where they were now living. The average number of years for valid cases between rural and urban were 9 and 16 respectively for students. These were 13 and 23 for graduates. The F-statistics for students' parents and graduates' father were 12 and 23. The significance levels were 0.0008 and 0.0000 for the two groups. About 53% of the cases were included in the analysis (see tables 6A1.17 and 6A1.18).

Breaking down the place where they were living now further by the place where they had lived most in order to trace their origin before coming to where they were living now, revealed striking findings. Among all students' parents who moved and were "now" staying in rural areas, they had been there on the ave.age for the previous 9 years. But out of these, those who had stayed in rural areas for most of the time had been there for an average period of 12 while those who had spent most of their time in urban areas had been in rural for 4 years only. When those who were "now" in urban areas were examined, the average period for those who had spent most of their time in urban or rural areas was 16. However, those who came from rural areas, where they had spent most of their lives, had been in town for 11 years only. This compared unfavourably with those who had been in town for

most of their time for the previous 21 years. ANOVA F-ratio was 12 signifying the big differences which were significant at 0.0009 (see table 6A1.19).

The results for graduates fathers were similar. The average period of staying where they were "now" living for the entire population was 18 years. But those who were "now" in rural areas had been there for an average of 12 years. Those fathers who had been in rural areas for most of the time had been there for an average period of 14 years. But those who had recently returned from town where they spent most of their time had now been in rural areas for an average period of only 8 years. However all those who were now living in town had been there for an average period of 23 years. Those who had moved to town shortly, having spent most of their time in rural areas had been in town for an average period of 15 years while those who moved there many years back had shared an average of 24 years. ANOVA F-ratio was large at 26 indicating the wide differences. The significance level was very low at 0.0000 showing that the groups were very different (see table 6A1.20)

The interpretation was that those who moved to town stayed there longer than those who moved to the rural areas. Hence this further strengthened the evidence that there was a tendency for people who had stayed longer in town to permanently remain there. It has been shown that those who had stayed in town for most of their time having emigrated from rural areas have been there for at least 23 years. Even those who had recently gone to town had at least stayed there for at least 15 years.

6A1.2.2.1.2 **CONCLUSION**

It was therefore established that for those parents who had stayed most of their time in urban areas, having been born in a village was not a paramount factor in determining where they were living "now". They were actually similar to those who were born in town. The main conclusion was that those who had stayed for a long time in urban areas, do not on the average respond to the presidents' call of going back to the land.

6A1.2.2.1.3 **Hypothesis Testing**

The alternative hypothesis of hypothesis 2 that there was a difference between immigrants and villagers in selecting their permanent home in that the former tended to remain in town for good was supported. The null hypothesis of no difference was therefore rejected.

Table 6A1.17 Differences of Mean number of years between rural and urban for place Student's father was now living

D E S C R I P T I O N O F S U B P O P U L A T I O N S

Criterion Variable YEARS AGO FATHER MOVED TO PRESENT PLACE
Broken Down by PROVINCE STUDENT'S FATHER LIVES NOW

Place Father Lives Now	No.	Mean	Std Dev
For Entire Population	95	13	11
RURAL	38	9	9
URBAN	57	16	11

F = 12 P = 0.0008 No. Missing = 86 or 48%

Table 8A1.18 Differences of Mean number of years between rural and urban for place Graduate's father was now living since moving to present place.

DESCRIPTION OF SUBPOPULATIONS

Criterion Variable YEARS AGO GRADUATE'S FATHER MOVED TO PRESENT
Broken Down by TYPE OF PROVINCE GRADUATE'S FATHER LIVES NOW

Province Father Lives Now	No.	Mean	Std Dev
For Entire Population	116	18	12
RURAL	53	13	10
URBAN	63	23	12

F = 23 P = 0.0000 No. Missing = 138 or 54%

Table 8A1.19 Differences of Mean number of years between rural and urban for place Student's parents were now living since moving compared to where they had lived most of their time.

DESCRIPTION OF SUBPOPULATIONS

Criterion Variable YEARS AGO STUD'S PARENT'S MOVED TO PRESENT
Broken Down by PROVINCE STUDENT'S FATHER LIVES NOW
by PROVINCE STUDENT'S FATHER HAS LIVED MOST

Province Father Lives Now	Place	No.	Mean	Std Dev
For Entire Population		84	14	11
PROVINCE FATHER LIVES NOW	RURAL	34	9	9
PROVINCE FATHER HAS LIVED MOST	RURAL	22	12	10
PROVINCE FATHER HAS LIVED MOST	URBAN	12	4	4
PROVINCE FATHER LIVES NOW	URBAN	50	18	11
PROVINCE FATHER HAS LIVED MOST	RURAL	17	11	6
PROVINCE FATHER HAS LIVED MOST	URBAN	33	21	12

F = 12 P = 0.0009 No. Missing = 97 or 54%

Table 6A1.20 Differences of Mean number of years between rural and urban for place Graduate's parents were now living since moving compared to where they had lived most of their time.

D E S C R I P T I O N O F S U B P O P U L A T I O N S

Criterion Variable YEARS AGO GRADUATE'S FATHER MOVED TO PRESENT
Broken Down by TYPE OF PROVINCE GRADUATE'S FATHER LIVES NOW
by PROVINCE GRADUATE'S FATHER HAS LIVED MOST

Variable	Place	No.	Mean	Std Dev
For Entire Population		112	18	12
PROVINCE FATHER LIVES NOW	RURAL	50	12	9
PROVINCE FATHER HAS LIVED MOST	RURAL	33	14	10
PROVINCE FATHER HAS LIVED MOST	URBAN	17	8	6
PROVINCE FATHER LIVES NOW	URBAN	62	23	13
PROVINCE FATHER HAS LIVED MOST	RURAL	11	15	9
PROVINCE FATHER HAS LIVED MOST	URBAN	51	24	13

F = 26 P = 0.0000 No. Missing = 142 or 56%

6A1.2.2.2. Students' and Graduates' Permanent Home

In order to determine students' and graduates' tendencies of remaining permanently in town or going back to the land, they were asked to state what province they regarded as their permanent home.

Surprisingly, a great proportion of 63% of graduates considered rural areas as their permanent home. This was not withstanding the following findings that:

1) 43% and 39% of students' and graduates' fathers respectively had stayed most of their time in urban areas.

2) about 47% and 38% of students' and graduates' fathers respectively were living in town.

3) 73% and 69% of students' and graduates' fathers respectively who were born in villages but had spent most of their time in urban areas, were still living in urban areas. Thus only 27% in the case of student's fathers and 31% graduates' fathers had responded to the call of going back to the land;

4) students' and graduates' fathers who had moved to towns had lived there on the average for 18 years respectively. Those who had stayed to town longest had in fact been there for at least 23 years;

5) concentration on fathers who had stayed mostly in town, actually revealed that those who were born in rural areas were not statistically different from those who were born in town in their preferences of staying in town. Their proportions were 73% and 100% for students' fathers born in rural and town respectively. The proportions were 69% and 91% for graduates' fathers as seen above.

6) 46% of students and 42% of graduates were born in town

7) 78% of students and 89% of graduates were still living in urban areas

The findings regarding father were the same for mother. But are not shown for lack of space. Thus students' and graduates' responses of such a large proportion of 7 out 10 for both groups who regarded rural areas as their homes could only be explained by Zambia's traditional view that one's ancestor's birth place is one's home. It was therefore unlikely that most of them would

return to and live in villages when as seen above a good percentage of nearly 1 out of 2 of all respondents' fathers were staying in urban areas. Further about 7 out of 10 respondents' fathers who were born in villages but stayed most in town have lived there for such a long period of about 20 years. This traditional view was however explored further.

Findings revealed that for those students or graduates who were born in rural areas, place of birth was one of the determinants of their permanent home. The proportions were 85% and 77% of students and graduates respectively who chose the rural areas as their permanent home. But for those who were born in town, they were divided as 52% of students and 43% of graduates chose rural areas. These differences were significant at 0.0000.

Evidence showed that parents' place of birth was a more important criteria, as it was proposed above for those who were born in rural areas as well as those who were born in town. About 76% of students and 73% of graduates whose fathers were born in rural areas chose it as the permanent home. But 90% and 87% of students and graduates respectively whose fathers were born in urban areas chose those places as their permanent homes. These differences were significant at 0.000 (see tables 6A1.21 and 6A1.22).

The place where parents had lived most had also an influence in electing a permanent home. About 89% and 83% of students and graduates whose fathers had stayed most in rural areas chose the villages as their permanent homes. But 54% and 67% of students

and graduates whose fathers had lived most in urban areas chose towns as their permanent home (see table 6A1.23 and 6A1.24).

Parents' place of birth was a more important criterion than respondent's own place of birth. When fathers who were born in rural areas were isolated and studies separately, 86% of students born in rural areas compared to 61% born in urban chose the rural areas. But the differences were significant at 0.0011 (see table 6A1.25). In the case of graduates whose father's were born in rural, the proportions of 77% and 65% in selecting rural as their permanent home were very close regardless of whether respondent was born in rural or urban. This closeness was reflected in the non significance of the of the prob values. So what mattered was where the father was born, not where the child was born (see table 6A1.26).

Table 6A1.21 TYPE OF STUDENT'S PERMANENT HOME BY PROVINCE STUDENT'S FATHER WAS BORN

STUDENT'S PERMANENT HOME	STUDENT'S FATHER'S PLACE OF BIRTH		
	RURAL	URBAN	
	No.	No.	Total
	Row %	Row %	No.
	Col. %	Col. %	Row %
RURAL	114	1	115
	99.1	.9	71.9
	76.0	10.0	
URBAN	36	9	45
	80.0	20.0	28.1
	24.0	90.0	
Column Total No.	150	10	160
Column Total %	93.8	6.3	100.0

I^2 = 17, P = 0.0000, Phi = 0.36, No. Missing = 21

Table 6A1.22 TYPE OF GRAD'S PERMANENT HOME BY PROVINCE GRADUATE'S FATHER WAS BORN

GRADUATE'S PERMANENT HOME	GRADUATE'S FATHER'S PLACE OF BIRTH		
	RURAL	URBAN	
	No.	No.	Total
	Row %	Row %	No.
	Col. %	Col. %	Row. %
RURAL	143	4	147
	97.3	2.7	64.8
	72.6	13.3	
URBAN	54	26	80
	67.5	32.5	35.2
	27.4	86.7	
Column Total No.	197	30	227
Column Total %	86.8	13.2	100.0

I^2 = 38, P = 0.0000, Phi = 0.42, No. Missing = 27

Table 6A1.23 TYPE OF STUDENT'S PERMANENT HOME BY PLACE STUDENT'S FATHER HAS LIVED MOST

STUDENT'S PERMANENT HOME	STUDENT'S FATHER'S PLACE LIVED MOST		
	RURAL	URBAN	
	No.	No.	Total
	Row %	Row %	No.
	Col. %	Col. %	Row %
RURAL	81	33	114
	71.1	28.9	69.9
	89.0	45.8	
URBAN	10	39	49
	20.4	79.6	30.1
	11.0	54.2	
Column Total No.	91	72	163
Column Total %	55.8	44.2	100.0

I^2 = 34, P = 0.0000, Phi = 0.47, No. Missing = 18

Table 6A1.24 TYPE OF GRAD'S PERMANENT HOME BY PLACE GRADUATE'S FATHER HAS LIVED MOST

GRADUATE'S PERMANENT HOME	GRADUATE'S FATHER'S PLACE LIVED MOST		
	RURAL	URBAN	
	No.	No.	Total
	Row %	Row %	No.
	Col. %	Col. %	Row. %
RURAL	114	32	146
	78.1	21.9	62.1
	83.2	32.7	
URBAN	23	66	89
	25.8	74.2	37.9
	16.8	67.3	
Column Total No.	137	98	235
Column Total %	58.3	41.7	100.0

I^2 = 60, P = 0.0000, Phi = 0.51, No. Missing = 19

Table 6A1.25 TYPE OF STUDENT'S PERMANENT HOME BY STUDENT'S PROVINCE BIRTH PLACE CONTROLLING FOR.. PLACE FATHER WAS BORN: RURAL

STUDENT'S PERMANENT HOME	STUDENT'S FATHER'S PLACE OF BIRTH		
	RURAL	URBAN	
	No.	No.	Total
	Row %	Row %	No.
	Col. %	Col. %	Row %
RURAL	78	36	114
	68.4	31.6	76.0
	85.7	61.0	
URBAN	13	23	36
	36.1	63.9	24.0
	14.3	39.0	
Column Total No.	91	59	150
Column Total %	60.7	39.3	100.0

I^2 = 11, P = 0.0011, Phi = 0.28

Table 6A1.26 TYPE OF GRAD'S PERMANENT HOME BY GRADUATES'S PROVINCE BIRTH PLACE CONTROLLING FOR.. PLACE FATHER WAS BORN: RURAL

GRADUATE'S PERMANENT HOME	GRADUATE'S PLACE OF BIRTH		
	RURAL	URBAN	
	No.	No.	Total
	Row %	Row %	No.
	Col. %	Col. %	Row. %
RURAL	103	40	143
	72.0	28.0	73.0
	76.9	64.5	
URBAN	31	22	53
	58.5	41.5	27.0
	23.1	35.5	
Column Total No.	134	62	196
Column Total %	68.4	31.6	100.0

I^2 = 3, P = 0.1016, Phi = 0.13

In order to test hypothesis 3 that permanent home was was independent of parents' place of residence, the two were compared. About the same proportion of 50% of students' fathers alive were staying in rural and urban areas. Yet 93% of students whose fathers were living in rural areas regarded them as their permanent homes. But a smaller proportion of 44 of students whose fathers were living in town regarded rural areas as their permanent homes. The two groups were statistically different at 0.0000 and phi was 0.5 (see table 6A1.27).

The conclusion was that the group whose parents were "now" living in rural areas was different from the one whose parents were living in urban areas, the place where parents were living explained 0.5 of the variation in selecting a permanent home. But there was something else which determined a permanent home. Hence the null hypothesis that selection of permanent home by students was independent of parents place of residence was rejected and the alternative hypothesis that permanent home depended on parents' place of residence was accepted.

Analysis of graduates' responses revealed similar findings. About 77% whose parents were living in rural areas selected rural areas as their permanent home. But 68% whose parents were staying in urban areas selected those as their permanent homes. The differences were significant at 0.0000. Phi explained 0.4 of the variation (see table 6A1.28). Therefore the conclusion was that the place where parents were living had a bearing in selecting a permanent home.

Table 6A1.27 STUDENT'S PERMANENT HOME BY PROVINCE STUDENT'S FATHER LIVES NOW

STUDENT'S PERMANENT HOME	STUDENT'S FATHER'S PRESENT RESIDENCE		
	RURAL	URBAN	
	No.	No.	Total
	Row %	Row %	No.
	Col. %	Col. %	Row %
RURAL	66	31	97
	68.0	32.0	68.8
	93.0	44.3	
URBAN	5	39	44
	11.4	88.6	31.2
	7.0	55.7	
Column Total No.	71	70	141
Column Total %	50.4	49.6	100.0

I^2 = 37, P = 0.0000, Phi = 0.53, No. Missing = 40

Table 6A1.28 TYPE OF GRAD'S PERMANENT HOME BY PROVINCE GRADUATE'S FATHER LIVES NOW

GRADUATE'S PERMANENT HOME	GRADUATE'S FATHER'S PRESENT RESIDENCE		
	RURAL	URBAN	
	No.	No.	Total
	Row %	Row %	No.
	Col. %	Col. %	Row. %
RURAL	80	24	104
	76.9	23.1	58.1
	76.9	32.0	
URBAN	24	51	75
	32.0	68.0	41.9
	23.1	68.0	
Column Total No.	104	75	179
Column Total %	58.1	41.9	100.0

I^2 = 34, P = 0.0000, Phi = 0.45, No. Missing = 75

When place where parents were born was isolated results showed that place where parents were living "now" was still an important criterion. However, it was a more important criterion for students than for graduates where the parents were born in rural areas in selecting a permanent home. Results showed that 93% of students whose fathers were born in rural areas, but who were now staying in rural areas considered rural area as their home. However for children whose fathers were born in villages but stayed most of their time in urban areas, a less proportion of 55% considered rural area as their home. Thus 45% identified themselves with urban areas. These differences were significant at 0.0000 and phi was 0.4 (see table 6A1.28). For the few children whose fathers were born in urban areas, it was not surprising to note that almost all (90%) regarded urban areas as their home.

The same conclusion was reached for graduates. About 77% whose fathers were born in rural and were now living in rural areas regarded rural areas as their permanent home. But 45% whose fathers were born in rural area but were now living in town, still regarded rural area as their home. These differences were significant at 0.0002 (see table 6A1.30). There was no difference for the few graduates' fathers who were born in town.

Thus it would appear that although the place where the parents were living was an important criterion, for those who were born in rural areas, the place of origin was still more important in determining the respondents permanent home. This agrees with the researcher's hypothesis of the traditional tendency of regarding one's ancestor's home as one's permanent home.

Table 6A1.29 TYPE OF STUDENT'S PERMANENT HOME BY PLACE STUDENT'S FATHER LIVES NOW CONTROLLING FOR.. PLACE FATHER WAS BORN: RURAL

STUDENT'S PERMANENT HOME	STUDENT'S FATHER'S PRESENT RESIDENCE		
	RURAL	URBAN	
	No.	No.	Total
	Row %	Row %	No.
	Col. %	Col. %	Row %
RURAL	66	28	94
	70.2	29.8	77.0
	93.0	54.9	
URBAN	5	23	28
	17.9	82.1	23.0
	7.0	45.1	
Column Total No.	71	51	122
Column Total %	58.2	41.8	100.0

$I^2 = 22$, $P = 0.0000$, Phi = 0.45

Table 6A1.30 TYPE OF GRAD'S PERMANENT HOME BY PROVINCE GRADUATE'S FATHER LIVES NOW CONTROLLING FOR.. PLACE FATHER WAS BORN: RURAL

GRADUATE'S PERMANENT HOME	GRADUATE'S FATHER'S PRESENT RESIDENCE		
	RURAL	URBAN	
	No.	No.	Total
	Row %	Row %	No.
	Col. %	Col. %	Row %
RURAL	78	20	98
	79.6	20.4	68.5
	78.8	45.5	
URBAN	21	24	45
	46.7	53.3	31.5
	21.2	54.5	
Column Total No.	99	44	143
Column Total %	69.2	30.8	100.0

$I^2 = 14$, $P = 0.0002$, Phi = 0.33

This view was again confirmed by keeping father's place of birth constant and evaluating the influence of where father has lived most in selecting a permanent home. Almost all students (93%) whose fathers were born in rural areas and were still living in rural areas selected rural area as their permanent home. But about 1 out of 2 (52%) whose parents were born in rural areas, but lived most of their time in urban areas selected rural area as their home (see table 6A1.31). These differences were significant at 0.0000 phi was 0.0. Those students whose parents were born in town, naturally all of them selected town as their home.

The same conclusions were reached for graduates. The largest proportion of 84% compared to 49% whose parents had stayed most in rural and urban areas respectively, but were born in rural areas selected rural area as their permanent home (table 6A1.32). This again shows an assimilation rate of 1 out of 2 in calling town their permanent home because their parents stayed most of their times there.

The main conclusions were therefore that a respondent's ancestor's place was of paramount importance in determining one's permanent home in 9 out of 10 cases. But the place where parents lived most of the time or where they were living now was of secondary importance. They nevertheless influenced a respondent's selection of a permanent home in 1 out of 2 cases

Table 6A1.31 TYPE OF STUDENT'S PERMANENT HOME BY PROVINCE STUDENT'S FATHER HAS LIVED MOST CONTROLLING FOR..PLACE FATHER WAS BORN: RURAL AREA

STUDENT'S PERMANENT HOME	STUDENT'S FATHER'S PLACE LIVED MOST		
	RURAL	URBAN	
	No.	No.	Total
	Row %	Row %	No.
	Col. %	Col. %	Row %
RURAL	80	28	108
	74.1	25.9	76.6
	92.0	51.9	
URBAN	7	26	33
	21.2	78.8	23.4
	8.0	48.1	
Column Total No.	87	54	141
Column Total %	61.7	38.3	100.0

I^2 = 28, P = 0.0000, Phi = 0.46

Table 6A1.32 TYPE OF GRADUATES'S PERMANENT HOME BY PLACE GRADUATE'S FATHER HAS LIVED MOST CONTROLLING FOR..PLACE FATHER WAS BORN: RURAL AREA

GRADUATE'S PERMANENT HOME	GRADUATE'S FATHER'S PLACE LIVED MOST		
	RURAL	URBAN	
	No.	No.	Total
	Row %	Row %	No.
	Col. %	Col. %	Row. %
RURAL	112	28	140
	80.0	20.0	73.3
	83.6	49.1	
URBAN	22	29	51
	43.1	56.9	26.7
	16.4	50.9	
Column Total No.	134	57	191
Column Total %	70.2	29.8	100.0

I^2 = 23, P = 0.0000, Phi = 0.36

8A1.2.2.2.1 Hypothesis Testing : Students' and Graduates' Selection of permanent Home

Hypothesis 3 that students and graduates tended to select urban areas as their permanent homes regardless of their birth place or that of their parents could therefore not be supported by evidence. What was true was that their place of birth was not a determinant for those who were born in rural areas, but it was for those who were born in town. Further the secondary hypothesis that permanent home by students or graduates was independent of parent's place of residence was rejected for lack of evidence. The alternative hypothesis that parents place of residence was an important criterion was therefore accepted. Still further the tertiary hypothesis that respondent's permanent home was not related to parent's place of birth was rejected since there was no evidence to support it. The alternative hypothesis that parent's place of birth influenced the selection of permanent home was then accepted. The significance levels in all these cases were 0.0000.

There was however support for the notion that the place where a respondent or his parent's stayed most of the time partially determined his permanent home. This was also significant at 0.000.

6A1.3 OVERALL CONCLUSIONS

Findings indicated that a very large proportion of about 9 out of 10 students' and graduates' parents were born in rural areas. Further a good proportion of 2 out of 5 people had stayed most of the time in urban areas. The majority of 8 out of 10 people "now" staying on the copperbelt and Lusaka were immigrants from rural areas.

This tendency of staying in urban areas by students' and graduates' parents was equally applicable to their own children. The concentration was expected to be worse since about 1 out of 2 of these offsprings were actually born in urban areas in large families. The average size of a family, for example, was about 5 children in the case of students. The greatest majority of at least 8 out of 10 were now living in urban areas. Even those who were born in rural areas accounting for about 7 out of 10 were also living in urban areas.

Although there was no direct evidence to support that students and graduates intended to make urban areas as their permanent homes, it was very likely that they would remain there for a very long time. Their own offsprings would probably also remain there, thus intensifying the urban population explosion. This view was based upon the findings that once a person tested town life, he became assimilated with the town folks with whom he identified himself. It thus became more difficult for him to return to the village. About 7 out of 10 of those who were born in villages but had stayed most of their time (about 20 years on

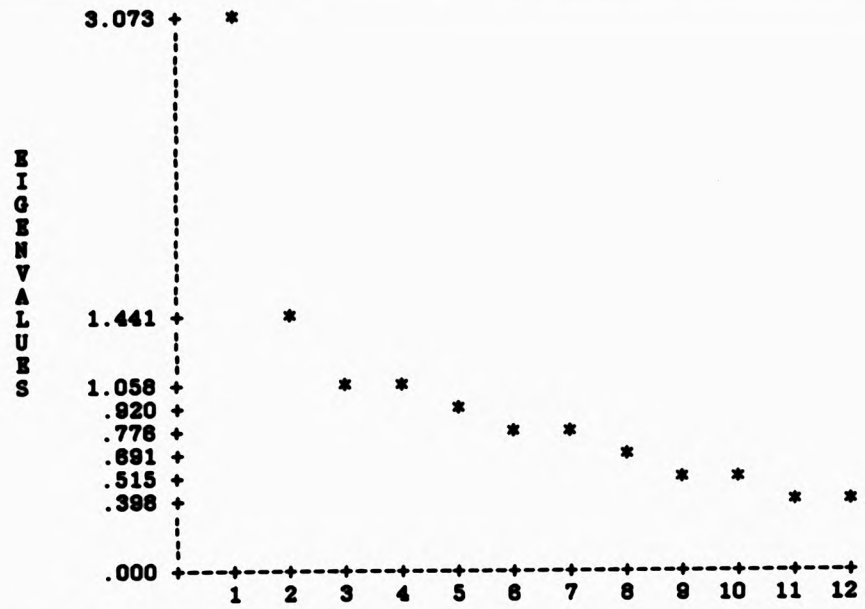
the average), were still living in town. Thus pronouncements by the greatest majority of about 7 out of 10 and graduates that their permanent homes were rural areas was contradicted by this evidence. Such statements would therefore only be explained in terms of the traditional notion that one's ancestor's home was one's permanent home.

These findings of continued concentration of the older and the younger population in the two urban provinces have serious social and economic implications. This situation would exacerbate the already critical demand for more social services. It will also constrain the job market in the urban areas. This would in turn put more pressure on the Zambian government to create more jobs. This burden can only be alleviated by expanding the economy through creation of more businesses by potential and existing businessmen to absorb the ever increasing labour supply.

Several questions were raised in the background chapter. First who will form more businesses to create more jobs, second whether conducive government policy and support exist and third small business supporting institutions' policies are favourable. Refer to the main chapter 6, and chapters 7 through 10 for possible answers.

Chapter 6 Appendix 2 Figures and Tables

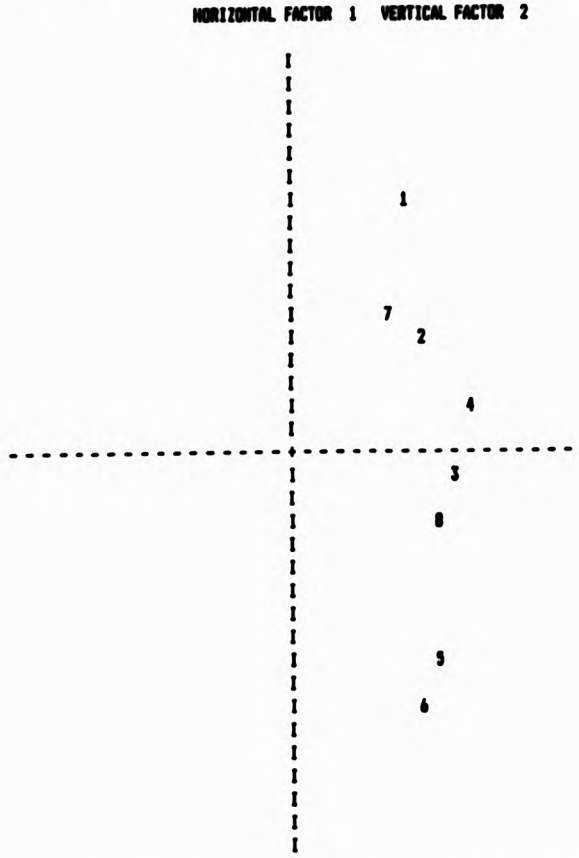
Figure 6A2.1 Scree plot for university respondents



PC EXTRACTED 4 FACTORS.

Figure 6A2.2 Plot of factors before rotation

SKIPPING ROTATION 1 FOR EXTRACTION 1 IN ANALYSIS 1



SYMBOL	VARIABLE	COORDINATES	SYMBOL	VARIABLE	COORDINATES	SYMBOL	VARIABLE	COORDINATES
1	HIGH.SALARY	(.46,.63)	2	STAT.DEPTS.	(.49, .30)	3	STAT.DEPTS.	(.63,-.04)
4	STAT.POWER	(.64,.10)	5	RES.AVAIL.	(.54, -.47)	6	TRAIN.GROUND	(.48,-.39)
7	JOB SECURITY	(.40,.35)	8	PRED.ATMOS.	(.52, -.16)			

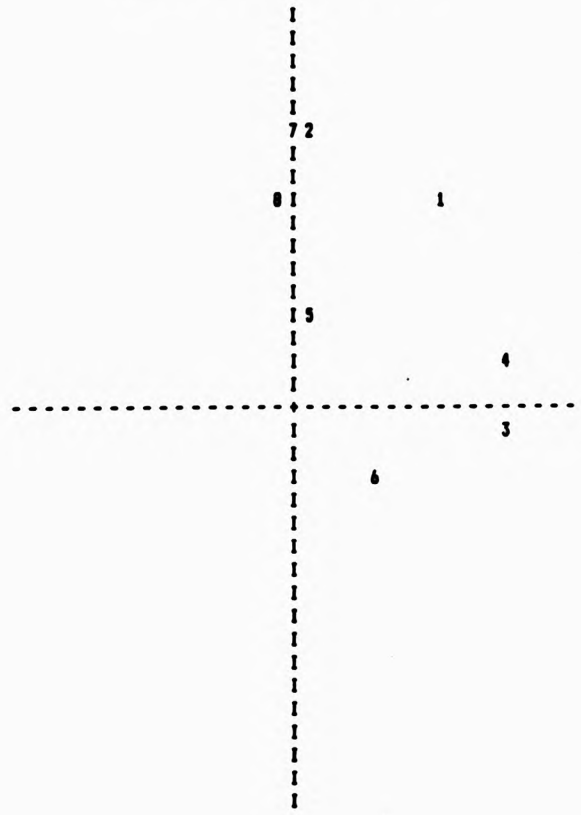
ANALYSIS NUMBER 2 LISTWISE DELETION OF CASES WITH MISSING VALUES

Figure 6A2.3 Factor transformation matrix of rotated factors

FACTOR TRANSFORMATION MATRIX:

	FACTOR 1	FACTOR 2	FACTOR 3
FACTOR 1	.66	.54	.52
FACTOR 2	.19	.56	-.81
FACTOR 3	-.73	.63	.27

HORIZONTAL FACTOR 1 VERTICAL FACTOR 2



SYMBOL	VARIABLE	COORDINATES	SYMBOL	VARIABLE	COORDINATES	SYMBOL	VARIABLE	COORDINATES
1	STAT HIGH.SAL	(.53, .52)	2	SUPPORT.SERV.	(.06, .70)	3	MANY DEPTS.	(.77, .01)
4	STAT.POWER	(.81, .08)	5	RESOUR.AVAIL.	(.07, .19)	6	TRA. GROUND	(.29,-.14)
7	JOB SECURITY	(.04, .66)	8	PRE.ATMOSPHE.	(-.04, .50)			

Table 62.1 Correlation Matrix of university respondents' influencing/ discouraging factors for working in small firms

CORRELATION MATRIX:

	ABILITY TO TAKE INITIATIVE	OPPORTUNITY FOR ADDITIONAL JOBS	INVOLVEMENT IN DECISION MAKING	TREATED LIKE OTHER	FEELING OF OWN ORGANISATION	CONTRIBUTION IS WELCOME	TESTING GROUND TO START OWN FIRM	GAIN EXPERIENCE TO START OWN FIRM	TAKE INITIATIVE	DIFFICULTY GETTING A SMALL	LITTLE SCOPE FOR DEVELOPMENT	POOR RELATIONS WITH CO-WORKERS
ABILITY TO TAKE INITIATIVE	1.00											
OPPORTUNITY FOR ADDITIONAL JOBS	.33	1.00										
INVOLVENT IN DECION MAKING	.46	.24	1.00									
TREATED LIKE OTHER	.25	.14	.36	1.00								
FEELING OF OWN ORGANISATION	.39	.21	.31	.48	1.00							
CONTRIBUTION IS WELCOME	.30	.26	.26	.31	.44	1.00						
TESTING GROUND TO START OWN FIRM	.25	.21	.32	.19	.22	.17	1.00					
GAIN EXPERIENCE TO START OWN FIRM.	.28	.29	.18	.09	.24	.30	.34	.00				
DIFFICULTY OF GETTING A SMALL FIRM	.01	.03	-.04	.03	-.01	-.03	.01	.08	1.00			
LITTLE SCOPE FOR DEVELOPMENT	.21	.21	.12	.02	.15	.06	.05	.13	.21	1.00		
RESOURCE CONSTRAINTS FOR PLANNING	-.10	.02	-.09	-.10	-.09	-.15	-.18	-.03	.16	.15	1.00	
POOR RELATIONS WITH CO-WORKERS	.06	-.03	.10	-.04	.03	.10	-.04	.04	.03	.11	.01	1.00

KAISER-MEYER-OLKIN MEASURE OF SAMPLING ADEQUACY = .74467
BARTLETT TEST OF SPHERICITY = 824.95822, SIGNIFICANCE = .00000
THERE ARE 38 (28.8%) OFF-DIAGONAL ELEMENTS OF AIC MATRIX > 0.09

Table 62.2 Anti-image covariance matrix for university respondents to work in small business

	ABILITY TO TAKE INITIATIVE	OPPORTUNITY FOR ADDITIONAL JOBS	INVOLVEMENT IN DECISION MAKING	TREATED LIKE OTHER	FEELING OF OWN ORGANISATION	CONTRIBUTION IS WELCOME	TESTING GROUND TO START OWN FIRM	GAIN EXPERIENCE TO START OWN FIRM	TAKE INITIATIVE	DIFFICULTY GETTING A SMALL	LITTLE SCOPE FOR DEVELOPMENT	POOR RELATIONS WITH CO-WORKERS
ABILITY TO TAKE INITIATIVE	.66											
OPPORTUNITY FOR ADDITIONAL JOBS	-.12	.79										
INVOLVENT IN DECION MAKING	-.22	-.05	.67									
TREATED LIKE OTHER	.03	-.00	-.16	.69								
FEELING OF OWN ORGANISATION	-.13	.01	.00	-.24	.61							
CONTRIBUTION IS WELCOME	-.03	-.11	-.02	-.08	-.18	.68						
TESTING GROUND TO START OWN FIRM	-.02	-.06	-.14	-.03	-.05	.03	.77					
GAIN EXPERIENCE TO START OWN FIRM.	-.07	-.12	.01	.06	-.04	-.13	-.21	.76				
DIFFICULTY OF GETTING A SMALL FIRM	-.00	.01	.06	-.07	.03	.03	-.02	-.06	.92			
LITTLE SCOPE FOR DEVELOPMENT	-.09	-.11	-.02	.03	-.00	.04	.01	-.02	-.16	.85		
RESOURCE CONSTRAINTS FOR PLANNING	.03	-.06	-.01	.03	-.00	.09	.14	-.03	-.12	-.11	.90	
POOR RELATIONS WITH CO-WORKERS	-.01	.09	-.00	.00	.03	-.16	.06	-.01	-.02	-.09	-.01	.92

Table 602.3 Anti-Image Correlation Matrix for university Respondents to work in small business

	ABILITY TO TAKE INITIATIVE	OPPORTUNITY FOR ADDITIONAL JOBS	INVOLVEMENT IN DECISION MAKING	TREATED LIKE OWNER	FEELING OF OWN ORGANIZATION	CONTRIBUTION IS WELCOME	TESTING GROUND TO START FIRM	GAIN EXPERIENCE TO START FIRM	TAKE INITIATIVE	DIFFICULTY GETTING A SMALL	LITTLE SCOPE FOR DEVELOPMENT	POOR RELATIONS WITH CO-WORKERS
ABILITY TO TAKE INITIATIVE	.80											
OPPORTUNITY FOR ADDITIONAL JOBS	-.16	.81										
INVOLVEMENT IN DECISION MAKING	-.33	-.06	.76									
TREATED LIKE OWNER	.04	-.01	-.24	.71								
FEELING OF OWN ORGANIZATION	-.20	.01	.01	-.37	.76							
CONTRIBUTION IS WELCOME	-.01	-.13	-.05	-.12	-.27	.77						
TESTING GROUND TO START OWN FIRM	-.03	-.07	-.20	-.05	-.08	.04	.75					
GAIN EXPERIENCE TO START OWN FIRM	-.09	-.13	.02	.08	-.06	-.19	-.27	.76				
DIFFICULTY OF GETTING A SMALL FIRM	-.00	.01	.07	-.08	.05	.05	-.02	-.07	.52			
LITTLE SCOPE FOR DEVELOPMENT	-.12	-.13	-.03	.07	-.11	.06	.02	-.03	-.10	.46		
RESOURCE CONSTRAINTS FOR PLANNING	.07	-.07	-.02	.03	-.00	.12	.17	-.04	-.13	-.13	.42	
POOR RELATIONS WITH CO-WORKERS	-.01	.10	-.10	.10	.04	-.20	.07	-.01	-.03	-.10	-.01	.43

MEASURES OF SAMPLING ADEQUACY (MSA) ARE PRINTED ON THE DIAGONAL.

Table 602.4 Factor matrix for university respondents working in small firm

EXTRACTION USING PRINCIPAL-COMPONENTS ANALYSIS (PC)

INITIAL STATISTICS:

VARIABLE	COMMUNALITY	FACTOR	EIGENVALUE	% OF VAR	CUM %
ABILITY TO TAKE INITIATIVE	1	1	3.67	26	26
OPPORTUNITY FOR ADDITIONAL JOBS	1	2	1.44	12	38
INVOLVEMENT IN DECISION MAKING	1	3	1.12	9	47
TREATED LIKE OWNER	1	4	1.06	9	56
FEELING OF OWN ORGANIZATION	1	5	.92	8	64
CONTRIBUTION IS WELCOME	1	6	.88	7	71
TESTING GROUND FOR OWN FIRM	1	7	.78	7	77
GAIN EXPERIENCE TO START FIRM	1	8	.69	6	83
DIFFICULTY GETTING IN A SMALL	1	9	.63	5	88
LITTLE SCOPE DEVELOPMENT	1	10	.51	4	93
RESOURCE CONSTRAINT FOR PLANS	1	11	.39	4	97
POOR RELATIONS WITH CO-WORKERS	1	12	.40	3	100

Table 602.5 Final Statistics showing specificity and communality of a variable for university respondents

FINAL STATISTICS:

VARIABLE	COMMUNALITY	FACTOR	EIGENVALUE	% OF VA	CUM %
ABILITY TO TAKE INITIATIVE	.49	1	3.67	25.6	25.6
OPPORTUNITY FOR ADDITIONAL JOBS	.45	2	1.44	12.0	37.6
INVOLVEMENT IN DECISION MAKING	.44	3	1.12	9.3	47.0
TREATED LIKE OWNER	.73	4	1.06	8.8	55.8
FEELING OF OWN ORGANIZATION	.64				
CONTRIBUTION IS WELCOME	.55				
TESTING GROUND TO START OWN FIRM	.56				
GAIN EXPERIENCE TO START FIRM	.56				
DIFFICULTY OF GETTING IN A SMALL	.43				
LITTLE SCOPE FOR DEVELOPMENT	.52				
RESOURCE CONSTRAINT FOR PLANNING	.39				
POOR RELATIONS WITH CO-WORKERS	.85				

Table 682.6 University respondents reproduced correlation matrix for communalities and residuals

REPRODUCED CORRELATION MATRIX:

	ABILITY TO TAKE INITIATIVE	ABUNDANT SMALL JOBS	INVOLVEMENT IN DECISION MAKING	TREATED LIKE OTHER	FEELING OF OWN ORGANIZATION	CONTRIBUTION IS WELCOME	TESTING GROUND TO START FIRM	GAIN EXPERIENCE TO START FIRM	TAKE INITIATIVE	DIFFICULTY GETTING A SMALL	LITTLE SCOPE FOR DEVELOPMENT	POOR RELATIONS WITH CO-WORKERS
ABILITY TO TAKE INITIATIVE	.698	-.07	.02	-.11	-.07	-.13	-.11	-.13	-.08	-.03	-.00	-.04
OPPORTUNITY FOR ADDITIONAL JOBS	.40	.459	-.06	.01	-.03	.04	-.19	-.17	-.13	-.09	.00	.02
INVOLVMENT IN DECISION MAKING	.44	.31	.448	-.06	-.19	-.17	-.08	-.12	-.02	-.02	.07	.03
TREATED LIKE OTHER	.34	.13	.02	.738	-.15	-.07	.07	.11	.05	-.01	-.01	.11
FEELING OF OWN ORGANIZATION	.45	.25	.08	.44	.64	-.04	.01	.07	-.04	.00	.01	-.01
CONTRIBUTION IS WELCOME	.43	.22	.43	.38	.48	.533	-.08	.05	.06	-.06	.06	-.16
TESTING GROUND TO START OWN FIRM	.37	.41	.32	.11	.21	.22	.568	-.14	.10	.03	.07	.14
GAIN EXPERIENCE TO START OWN FIRM.	.40	.46	.30	-.02	.16	.26	.49	.564	.02	-.11	.07	-.02
DOFFICULTY OF GETTING A SMALL FIRM	.46	.16	-.02	-.00	.02	-.09	-.10	.05	.439	-.20	-.27	.07
LITTLE SCOPE FOR DEVELOPMENT	.24	.29	.14	.03	.15	.12	.02	.24	.41	.52	-.22	-.09
RESOURCE CONSTRAINTS FOR PLANNING	-.09	.02	-.16	-.10	-.10	-.21	-.26	-.10	.43	.37	.598	.03
POOR RELATIONS WITH CO-WORKERS	.11	-.05	.07	-.15	.04	.34	-.18	.07	-.04	.20	-.02	.856

THE LOWER LEFT TRIANGLE CONTAINS THE REPRODUCED CORRELATION MATRIX; THE DIAGONAL, COMMUNALITIES; AND THE UPPER RIGHT TRIANGLE, RESIDUALS BETWEEN THE OBSERVED CORRELATIONS AND THE REPRODUCED CORRELATIONS.

THERE ARE 30 (57.0%) RESIDUALS (ABOVE DIAGONAL) THAT ARE > 0.05

Table 682.7 WHETHER GRADUATE HAS WORKED IN SMALL BUSINESS BY BASIC YEAR OF GRADUATION FROM SBIS

WHETHER GRADUATE HAS WORKED IN SMALL BUSINESS	YEAR OF GRADUATION			
	1981 TO 1982 No. Row % Col. %	1983 TO 1984 No. Row % Col. %	1985 TO 1986 No. Row % Col.%	Total No. Row %
NO	30 30.4 67.9	69 34.1 85.2	64 33.5 84.2	191 85.7
YES	8 25.0 12.1	12 37.5 14.8	12 37.5 15.8	32 14.3
Column Total No.	66	81	76	223
Column Total %	29.6	36.3	34.1	100.0

χ^2 = .41 P = 0.8115; Cramer's V = 0.04; No. Missing = 31

Table 682.8 HOW TIME STUDENT WILL WORK IN SMALL BUSINESS BY PREFERRED TYPE OF DEGREE

HOW TIME STUDENT WILL WORK IN SMALL BUSINESS	TYPE OF PREFERRED DEGREE		
	(B.A) BUSINESS ADMINISTRATION No. Row % Col. %	(Bsc) ACCOUNTANCY No. Row % Col. %	Total No. Row %
IMMEDIATELY	7 30.4 19.4	16 69.6 14.3	23 15.5
TWO TO FIVE YEARS	6 33.3 16.7	12 66.7 10.7	18 12.2
SOMETIME IN FUTURE	19 25.0 52.8	57 75.0 50.9	76 51.4
NOT AT ALL	4 12.9 11.1	27 87.1 24.1	31 20.9
Column Total No.	36	112	148
Column Total %	24.3	75.7	100.0

χ^2 = 3; P = 0.43; Cramer's V = 0.14; No. Missing = 35

Table 62.9 STUDENT'S MAIN REASON FOR TIMING TO WORK IN SMALL BUSINESS BY PREFERRED TYPE OF DEGREE

MAIN REASON FOR THE TIMING TO WORK IN SMALL BUSINESS	STUDENT'S TYPE OF PREFERRED DEGREE		
	(B.A) BUSINESS ADMINISTRATION	(Bsc) ACCOUNTANCY	
	No. Row % Col. %	No. Row % Col. %	Total No. Row %
LARGE IS GREENER	19 22.4 47.5	66 77.6 62.3	85 58.2
SMALL BUSINESS FIRST TO GAIN EXPERIENCE AND CAPITAL	7 36.8 17.5	12 63.2 11.3	19 13.0
I WILL ESTABLISH MY OWN BUSINESS AFTER WORK IN LARGE	3 37.5 7.5	5 62.5 4.7	8 5.5
OTHER REASONS	11 32.4 27.5	23 67.6 21.7	34 23.3
Column Total No.	40	106	146
Column Total %	27.4	72.6	100.0

$\chi^2 = 3$; P = 0.4285; Cramer's V = 0.14; No. Missing = 35

TABLE 62.10 GRADUATE'S MAIN REASON FOR THE TIMING TO WORK IN SMALL BUSINESS BY GRADUATE'S TYPE OF 1015 DEGREE

MAIN REASON FOR THE TIMING TO WORK IN SMALL BUSINESS	GRADUATE'S TYPE OF 1015 DEGREE		
	(B.A) BUSINESS ADMINISTRATION	(Bsc) ACCOUNTANCY	
	No. Row % Col. %	No. Row % Col. %	Total No. Row %
LARGE IS GREENER	32 26.2 60.4	90 73.8 60.4	122 60.4
I WILL ESTABLISH MY OWN BUSINESS AFTER WORK IN LARGE	7 29.2 13.2	17 70.8 11.4	24 11.9
NOT GIVEN THOUGHT TO THE ISSUE	6 33.3 11.3	12 66.7 8.1	18 8.9
OTHER REASONS	8 21.1 15.1	30 78.9 20.1	38 18.8
Column Total No.	53	149	202
Column Total %	26.2	73.8	100.0

$\chi^2 = 1$; P = 0.7765; Cramer's V = 0.07; No. Missing = 52

Table 462.11 Distribution of Students' parents' education

STUDENT'S FATHER'S MAIN EDUCATION

EDUCATION LEVEL	No.	%	VALID %	CUM %
NO EDUCATION	11	6.1	6.2	6.2
PRIMARY EDUCAT	100	55.2	56.2	62.4
SECONDARY EDUCAT	43	23.8	24.2	86.5
COLLEGE	10	5.5	5.6	92.1
UNIVERS.EDUCAT.	14	7.7	7.9	
DID NOT STATE	3	1.7	MISSING	100.0
TOTAL	181	100.0	100.0	

STUDENT'S MOTHER'S MAIN EDUCATION

No.	%	VALID %	CUM %
50	27.6	27.8	27.8
95	52.5	52.8	80.6
22	12.2	12.2	92.8
6	3.3	3.3	96.1
7	3.9	3.9	100.0
1	.6	MISSING	
181	100.0	100.0	

Table 462.12 Distribution of graduates' parents' education

GRADUATE'S FATHER MAIN EDUCATION

EDUCATION LEVEL	No.	%	VALID %	CUM %
NO EDUCATION	33	13.0	13.1	13.1
PRIMARY EDUCAT	136	61.4	62.2	75.3
SECONDARY EDUCAT	45	17.7	17.9	93.2
COLLEGE	13	5.1	5.2	98.4
UNIVERS.EDUCAT.	4	1.6	1.6	100.0
DID NOT STATE	3	1.2	MISSING	
TOTAL	234	100.0	100.0	

GRADUATE'S MOTHER'S MAIN EDUCATION

No.	%	VALID %	CUM %
85	33.5	33.7	33.7
147	57.9	58.3	92.1
16	6.3	6.3	98.4
4	1.6	1.6	100.0
0	0.0	0.0	
2	.8	MISSING	
234	100.0	100.0	

Table 7A.1 Classification of Types of Manufacturing Firms (ISIC)

CLASSIFICATION	No.	%	VALID %	CUM %
METALS	2	.9	.9	.9
BRICKS, POTTERY, GLASS,CEMENT	16	7.3	7.3	8.3
CHEMICALS AND MAN-MADE FIBRES	27	12.4	12.4	20.6
METAL GOODS N.E.S	23	10.6	10.6	31.2
MECHANICAL ENGINEERING	7	3.2	3.2	34.4
OFFICE MACHINERY AND DATA PROCESSING EQUIPMENT	1	.5	.5	34.9
ELECTRICAL AND ELECTRONIC ENGINEERING	5	2.3	2.3	37.2
FOOD, DRINK & TOBACCO	48	22.0	22.0	59.2
TEXTILE INDUSTRY	11	5.0	5.0	64.2
LEATHER AND LEATHER GOODS	7	3.2	3.2	67.4
CLOTHING AND FOOTWEAR	47	21.6	21.6	89.0
TIMBER AND WOODEN FURNITURE	16	7.3	7.3	96.3
PAPER, PAPER PRODUCTS; PRINTING AND PUBLISHING	5	2.3	2.3	98.6
PROCESSING OF RUBBER AND PLASTICS	2	.9	.9	99.5
OTHER MANUFACTURING INDUSTRIES	1	.5	.5	100.0
TOTAL	218	00.0	100.0	

TABLE 70.2(a) CLASSIFICATION OF MANUFACTURING FIRM BY ENTREPRENEUR'S BASIC GROUP OF ORIGIN

Classification of Manufacturing Firm	Entrepreneur's Basic Origin: Indigenous Zambian	Foreign Origin	Total
	No. Row % Col. %	No. Row % Col. %	No. Row %
Bricks, Pottery, Glass, Cement	6 42.9 7.1	8 57.1 8.3	14 7.9
Chemicals and Man-made fibres	13 65.0 15.5	7 35.0 7.4	20 11.2
Metal Goods, n.e.s	5 35.7 6.0	9 64.3 9.6	14 7.9
Food, Drink & Tobacco	14 35.0 16.7	26 65.0 27.7	40 22.5
Textile Industry	2 18.2 2.4	9 81.8 9.6	11 6.2
Clothing and Footwear	26 59.1 31.0	18 40.9 19.1	44 24.7
Timber and Wooden Furniture	8 53.3 9.5	7 46.7 7.4	15 8.4
Other	10 50.0 11.9	10 50.0 10.6	20 11.2
Column Total No.	84	94	178
Column Total %	47.2	52.8	100.0

$\chi^2 = 12$; P = 0.0917; Cramer's V = 0.26; No. Missing 40

70.2(b) CLASSIFICATION OF MANUFACTURING FIRM BY SIZE OF FIRM BASED ON OPERATIONAL NO. OF EMPLOYEES PER ENTERPRISE

Classification of Manufacturing Firm	Size of Firm: Small Business	Large Business	Total
	No. Row % Col. %	No. Row % Col. %	No. Row %
Bricks, Pottery, Glass, Cement	11 91.7 7.6	1 8.3 2.6	12 6.6
Chemicals and Man-made fibres	17 77.3 11.8	5 22.7 12.8	22 12.0
Metal Goods, n.e.s	15 68.2 10.4	7 31.8 17.9	22 12.0
Food, Drink & Tobacco	29 80.6 20.1	7 19.4 17.9	36 19.7
Textile Industry	5 62.5 3.5	3 37.5 7.7	8 4.4
Clothing and Footwear	36 83.7 25.0	7 16.3 17.9	43 23.5
Timber and Wooden Furniture	14 93.3 9.7	1 6.7 2.6	15 8.2
Other	17 68.0 11.8	8 32.0 20.5	25 13.7
Column Total No.	144	39	183
Column Total %	78.7	21.3	100.0

$\chi^2 = 8$; P = 0.3089; Cramer's V = 0.21; No. Missing = 35

Table 70.3 ANOVA Analysis of Average Number of Firms per Enterprise By Entrepreneur's Origin

DESCRIPTION OF SUBPOPULATION

Criterion Variable: NUMBER OF FIRMS OWNED BY ENTERPRISE
Broken Down by: ENTREPRENEUR'S BASIC GROUP OF ORIGIN

Entrepreneur's Basic Origin	No.	Mean	Std Dev
For Entire Population	177	2.28	2.12
Indigenous Zambian	85	2.51	2.61
Foreign Origin	96	2.09	1.57

F = 2; P = 0.1590 Total No. 218; No. Missing = 41 or 19%

Table 70.4 ANOVA Analysis of Average Number of Firms per Enterprise By Entrepreneur's Citizenship

DESCRIPTION OF SUBPOPULATION

Criterion Variable: NUMBER OF FIRMS OWNED BY ENTERPRISE
Broken Down by: ENTREPRENEUR'S PRESENT CITIZENSHIP

Entrepreneur's Present Citizenship	No.	Mean	Std Dev
For Entire Population	177	2.28	2.12
Zambian	133	2.41	2.30
Other African Countries	6	1.16	.41
Indian / Pakistan / Srilankan	12	2.08	1.31
British	13	2.54	1.81
Other	13	1.46	.97

F = 1; P = 0.3542 Total No. 218; No. Missing = 41 or 19%

Table 70.5 ANOVA Analysis of Average Number of Firms per Enterprise By Size of Firm.

DESCRIPTION OF SUBPOPULATION

Criterion Variable: NUMBER OF FIRMS OWNED BY ENTERPRISE
Broken Down by: SIZE OF FIRM BASED ON EMPLOYEES WHEN OPERATIONAL

Size of Firm	Cases	Mean	Std Dev
For Entire Population	182	2.17	1.90
Small Business	143	1.62	.93
Large Business	39	4.15	2.97

F = 77; P = 0.0000 Total No. 218; No. Missing = 36 or 17%

Table 70.6 ANOVA Analysis of Average Number of Firms per Enterprise By Entrepreneur's Education

DESCRIPTION OF SUBPOPULATION

Criterion Variable: NUMBER OF FIRMS OWNED BY ENTERPRISE
Broken Down by: ENTREPRENEUR'S MAIN EDUCATION ACHIEV

Entrepreneur's Main Education	No.	Mean	Std Dev
For Entire Population	174	2.27	2.12
None	2	1.00	.00
Primary	24	1.33	.76
Secondary	76	2.01	1.30
College	26	2.38	1.86
University	46	3.17	3.14

F = 4; P = 0.0000 Total No. 218; No. Missing = 44 or 20%

Table 70.7 ANOVA Analysis of Average Number of Years of Delay After Registration Before Operations By Citizenship

DESCRIPTION OF SUBPOPULATION

Criterion Variable: LAG YEARS BETWEEN YEAR OF REGISTRATION AND OPERATION
Broken Down by: ENTREPRENEUR'S PRESENT CITIZENSHIP

Present Citizenship	No.	Mean	Std Dev
For Entire Population	159	.38	3.81
Zambian	117	.4	4.0
Other African Countries	6	.3	1.6
Indian / Pakistan / Srilankan	12	2.2	5.7
British	11	.5	2.0
Other	13	.8	1.6

F = .66; P = 0.662 Total No. 218; No. Missing = 59 or 27%

Table 70.8 ANOVA Analysis of Overall Average Number of Years Delay After Registration Before Operation By Education

DESCRIPTION OF SUBPOPULATION

Criterion Variable: LAG YEARS BETWEEN YEAR OF REGISTRATION AND OPERATION
Broken Down by: ENTREPRENEURS'S MAIN EDUCATION ACHIEVED

Entrepreneur's Education	No.	Mean	Std Dev
For Entire Population	156	.60	3.8
None	2	-13.00	1.41
Primary	23	-1.26	3.21
Secondary	69	.78	3.27
College	19	.95	2.13
University	43	1.79	4.17

F = 11; P = 0.0000 Total No. 218; No. Missing = 62 or 28%

Table 70.9 ANOVA Analysis of Average Number of Years of Operating Illegally Before Registration of Business By Entrepreneur's Education

DESCRIPTION OF SUBPOPULATION

Criterion Variable: ILLEGAL YEARS OF OPERATION BEFORE REGISTRATION
Broken Down by: SIZE OF FIRM BASED ON NO. OF EMPLOYEES PER ENTERPRISE WHEN OPERATIONAL

Size of Firm	No.	Mean	Std Dev
For Entire Population	48	-3.6	4.0
Small Business	32	-3.9	3.9
Large Business	8	-3.6	5.9

Total Cases = 218
Missing Cases = 170 or 81.7 Pct

F = .00 P = 0.9500 Total No. 218; No. Missing = 170 or 82%

Table 70.10 ANOVA Analysis of Average Number of Years of Operating Illegally Before Registration of Business by Entrepreneur's Education

DESCRIPTION OF SUBPOPULATION

Criterion Variable: ILLEGAL YEARS OF OPERATING BEFORE REGISTRATION
Broken Down by: ENTREPRENEURS'S MAIN EDUCATION ACHIEVED

Entrepreneur's Main Education	No.	Mean	Std Dev
For Entire Population	36	-3.19	3.44
None	2	-13.00	1.41
Primary	8	-4.75	3.11
Secondary	16	-2.38	2.36
College	3	-1.33	.58
University	7	-1.29	.49

F = 13; P = 0.0000 Total No. 218; No. Missing = 182 or 84%

Table 7A.11 ANOVA Analysis of Average Number of Years of Idling After Registration Before Commencing Business By Entrepreneur's Education

DESCRIPTION OF SUBPOPULATION

Criterion Variable YEARS OF IDLING AFTER REGISTRATION BEFORE STARTING BUSINESS
Broken Down by ENTREPRENEURS'S EDUCATION ACHIEVED

Entrepreneur's Education	No.	Mean	Std Dev
For Entire Population	64	3.27	3.72
Primary	6	1.50	.55
Secondary	29	3.17	3.28
College	8	2.75	2.19
University	21	4.10	5.02

F = .85; P = 0.4748 Total No. 218; No. Missing = 154 or 71%

Table 7A.12 WHETHER FIRM IS STILL OPERATIONAL BY ENTREPRENEUR'S BASIC GROUP OF ORIGIN

Whether Business is Still Operational	Entrepreneur's Basic Origin: Indigenous Zambian	Foreign Origin	Total
	No. Row % Col. %	No. Row % Col. %	No. Row %
Yes	63 44.1 75.0	80 55.9 85.1	143 80.3
Ceased Operating	12 70.6 14.3	5 29.4 5.3	17 9.6
Never Operated	9 50.0 10.7	9 50.0 9.6	18 10.1
Column Total No.	84	94	178
Column Total %	47.2	52.8	100.0

χ^2 = 4; P = 0.1133; Cramer's V = 0.16; No. Missing = 40

Table 7A.13 MAIN MOTIVE IN STARTING BUSINESS BY ENTREPRENEUR'S BASIC GROUP OF ORIGIN

Main Motive in Starting Business	Entrepreneur's Basic Origin: Indigenous Zambian	Foreign Origin	Total
	No. Row % Col. %	No. Row % Col. %	No. Row %
Money & Security	19 50.0 22.6	19 50.0 20.7	38 21.6
Personal Achievement/ Autonomy	23 47.9 27.4	25 52.1 27.2	48 27.3
Had necessary Skills	11 50.0 13.1	11 50.0 12.0	22 12.5
There was a ready Market	13 52.0 15.5	12 48.0 13.0	25 14.2
To help the Country	13 44.8 15.5	16 55.2 17.4	29 16.5
Other	5 35.7 6.0	9 64.3 9.8	14 8.0
Column Total No.	84	92	176
Column Total %	47.7	52.3	100.0

χ^2 = 1; P = 0.9434; Cramer's V = 0.08; No. Missing = 42

Table 7A.14 MOST INFLUENCING PERSON IN STARTING BUSINESS BY ENTREPRENEUR'S BASIC GROUP OF ORIGIN

Most influencing Person	Entrepreneur's Basic Origin: Indigenous Zambian	Foreign Origin	Total
	No. Row % Col. %	No. Row % Col. %	No. Row %
Father	9 34.6 10.8	17 65.4 18.7	26 14.9
Myself	53 46.5 63.9	61 53.5 67.0	114 65.5
My Wife / Husband	6 50.0 7.2	6 50.0 6.6	12 6.9
Other	15 68.2 18.1	7 31.8 7.7	22 12.6
Column Total No.	83	91	174
Column Total %	47.7	52.3	100.0

χ^2 = 4; P = 0.1342; Cramer's V = 0.18; No. Missing = 44

Table 7A.15 METHOD OF RAISING INITIAL CAPITAL BY ENTREPRENEUR'S BASIC GROUP OF ORIGIN

Method of Raising Initial Capital	Entrepreneur's Basic Origin: Indigenous Zambian	Foreign Origin	Total
	No. Row % Col. %	No. Row % Col. %	No. Row %
Own Savings	56 45.2 68.3	68 54.8 73.1	124 70.9
Family Loan		3 100.0 3.2	3 1.7
Family Grant	6 46.2 7.3	7 53.8 7.5	13 7.4
Bank Loan	4 50.0 4.9	4 50.0 4.3	8 4.6
Government Agency	3 60.0 3.7	2 40.0 2.2	5 2.9
Private Agency	2 100.0 2.4		2 1.1
Shareholders Parent Company	5 50.0 6.1	5 50.0 5.4	10 5.7
Private Company Assistnd	6 60.0 7.3	4 40.0 4.3	10 5.7
Column Total No.	82	93	175
Column Total %	46.9	53.1	100.0

χ^2 = 4; P = 0.5199; Cramer's V = 0.19; No. Missing = 43

Table 7A.16 WHETHER APPLIED FOR A BUSINESS LOAN BY ENTREPRENEUR'S BASIC GROUP OF ORIGIN

Whether applied for a Business Loan	Entrepreneur's Basic Origin: Indigenous Zambian No. / Row % / Col. %	Foreign Origin No. / Row % / Col. %	Total No. / Row %
No	36 / 40.0 / 42.9	54 / 60.0 / 57.4	90 / 50.6
Yes	48 / 54.5 / 57.1	40 / 45.5 / 42.6	88 / 49.4
Column Total No.	84	94	178
Column Total %	47.2	52.8	100.0

χ^2 = 3, P = 0.0729, Phi = 0.13, No. Missing = 40

Table 7A.17 WHETHER WOULD LIKE TO APPLY FOR BUSINESS LOAN BY SIZE OF FIRM BASED ON NO. OF EMPLOYEES WHEN OPERATIONAL

Whether Would like to apply for a loan	Size of Firm: Small Business No. / Row % / Col. %	Large Business No. / Row % / Col. %	Total No. / Row %
No	51 / 83.6 / 65.4	10 / 16.4 / 76.9	61 / 67.0
Yes	27 / 90.0 / 34.6	3 / 10.0 / 23.1	30 / 33.0
Column Total No.	78	13	91
Column Total %	85.7	14.3	100.0

χ^2 = .25, P = 0.6166, Phi = 0.09, No. Missing = 127

Table 7A.18 NAME OF MAIN ORGANISATION APPLIED TO FOR LOAN BY SIZE OF FIRM BASED ON NO. OF EMPLOYEES WHEN OPERATIONAL

Name of main organisation applied to	Size of Firm: Small Business No. / Row % / Col. %	Large Business No. / Row % / Col. %	Total No. / Row %
Bank	43 / 65.2 / 65.2	23 / 34.8 / 88.5	66 / 71.7
SEP	6 / 100.0 / 9.1		6 / 6.5
SIDO	7 / 87.5 / 10.6	1 / 12.5 / 3.8	8 / 8.7
Other	10 / 83.3 / 15.2	2 / 16.7 / 7.7	12 / 13.0
Column Total No.	66	26	92
Column Total %	71.7	28.3	100.0

χ^2 = 4; P = 0.1339; Cramer's V = 0.21; No. Missing = 126

Table 7A.19 NAME OF MAIN ORGANISATION APPLIED TO FOR LOAN BY ENTREPRENEUR'S MAIN EDUCATION

Name of main organisation applied to	Entrepreneur's Main Education: Small [illegible] No. / Row % / Col. %	Large Business No. / Row % / Col. %	Total No. / Row %
Bank	4 / 6.7 / 36.4	56 / 93.3 / 79.7	60 / 69.8
SEP	2 / 33.3 / 18.2	4 / 66.7 / 5.3	6 / 7.0
SIDO	3 / 37.5 / 27.3	5 / 62.5 / 6.7	8 / 9.3
Other	2 / 16.7 / 18.2	10 / 83.3 / 13.3	12 / 14.0
Column Total No.	11	75	86
Column Total %	12.8	87.2	100.0

χ^2 = 9; P = 0.0317; Cramer's V = 0.32; No. Missing = 132

Table 70.20 ANOVA Analysis of Mean Number of Successful Times in Obtaining a Loan broken down By Entrepreneur's Basic Group of Origin

DESCRIPTION OF SUBPOPULATIONS

Criterion Variable NUMBER OF SUCCESSFUL TIMES GOT LOAN
Broken Down by ENTREPRENEUR'S BASIC GROUP OF ORIGIN

Entrepreneur's Basic Origin	No.	Mean	Std Dev
For Entire Population	79	1.49	2.63
Indigenous Zambian	42	1.07	1.52
Foreign Origin	37	1.97	3.44

F = 2; P = 0.1286; Total No. 191; No. Missing = 112 or 58%

Table 70.21 ANOVA Analysis of Mean Number of Successful Times in Obtaining a Loan broken down By Entrepreneur's Nationality

DESCRIPTION OF SUBPOPULATIONS

Criterion Variable NUMBER OF SUCCESSFUL TIMES GOT LOAN
Broken Down by ENTREPRENEUR'S PRESENT CITIZENSHIP

Entrepreneur's Present Citizenship	No.	Mean	Std Dev
For Entire Population	79	1.49	2.63
Zambian	61	1.23	1.85
Other African Countries	3	.67	.58
Indian / Pakistan / Srilankan	4	.75	.96
British	5	5.00	6.73
Other	6	1.83	3.54

F = 4; P = 0.0013 Total No. 191; No. Missing = 112 or 59%

Table 70.22 ANOVA Analysis of Mean Amount of Loan Obtained By Nationality

DESCRIPTION OF SUBPOPULATIONS

Criterion Variable AMOUNT GIVEN FIRST TIME IN '000s
Broken Down by ENTREPRENEUR'S PRESENT CITIZENSHIP

Entrepreneur's Citizenship	No.	Mean	Std Dev
For Entire Population	45	177	312
Zambian	35	120	212
Other African Countries	2	800	990
Indian / Pakistan / Srilankan	2	256	326
British	3	300	444
Other	3	40	63

F = 4; P = 0.0063 Total No. 191; No. Missing = 146 or 76%

Table 70.23 ANOVA Analysis of Mean Number of Successful Times in Obtaining a Loan broken down By Size of Firm

DESCRIPTION OF SUBPOPULATION

Criterion Variable NUMBER OF SUCCESSFUL TIMES GOT LOAN
Broken Down by SIZE OF FIRM BASED ON NO. OF EMPLOYEES PER ENTERPRISE WHEN OPERATIONAL

Size of Firm	No.	Mean	Std Dev
For Entire Population	85	1.82	2.80
Small Business	63	1.33	2.10
Large Business	22	3.23	3.94

F = 8; P = 0.0056 Total No. 191; No. Missing = 106 or 56%

Table 7A.24 ANOVA Analysis of Mean Amount of First Loan Obtained By Size of Firm

D E S C R I P T I O N O F S U B P O P U L A T I O N S

Criterion Variable Broken Down by	AMOUNT GIVEN FIRST TIME IN '000s SIZE OF FIRM BASED ON NO. OF EMPLOYEES PER ENTERPRISE WHEN OPERATIONAL		
Size of Firm	No.	Mean	Std Dev
For Entire Population	53	176	284
Small Business	36	129	277
Large Business	17	275	280

F = 3; P = 0.0809 Total No. 191; No. Missing = 138 or 72%

Table 7A.23 SIZE OF FIRM BASED ON NO. OF EMPLOYEES PER ENTERPRISE WHEN OPERATIONAL BY ENTREPRENEUR - BASIC LEVEL OF ENTREPRENEUR'S EDUCATION

Size of Firm	Basic Education		
	Primary & Below No. Row % Col. %	Secondary & Above No. Row % Col. %	Total No. Row. %
Small Business	25 19.2 100.0	105 80.8 82.0	130 85.0
Large Business		23 100.0 18.0	23 15.0
Column Total No.	25	128	153
Column Total %	16.3	83.7	100.0

χ^2 = 4, P = 0.0462, Phi = 0.19, No. Missing = 43

TABLE 7A.26 WHETHER BUSINESSMAN HAS TAKEN ANY TRADE BY RESPONDENT'S STATUS IN THE FIRM

Whether Businessman has Taken Any Trade	Respondent's Status in the Firm		
	Business Owner No. Row % Col. %	Chief Executive No. Row % Col. %	Total No. Row. %
No	69 89.6 40.1	8 10.4 36.4	77 39.7
Yes	103 88.0 59.9	14 12.0 63.6	117 60.3
Column Total No.	172	22	194
Column Total %	88.7	11.3	100.0

χ^2 = .01, P = 0.9145, Phi = 0.02, No. Missing = 20

Table 70.27(a) ENTREPRENEUR'S FIRST ACTIVITY AFTER SCHOOL BY ENTREPRENEUR'S BASIC GROUP OF ORIGIN

Entrepreneur's First Activity	Entrepreneur's Basic Origin		
	Indigenous Zambian	Foreign Origin	Total
	No.	No.	
	Row %	Row %	No.
	Col. %	Col. %	Row %
Salaried Job	68	67	135
	50.4	49.6	78.0
	82.9	73.6	
Started Own Business	4	12	16
	25.0	75.0	9.2
	4.9	13.2	
Family Business		4	4
		100.0	2.3
		4.4	
Other	10	8	18
	55.6	44.4	10.4
	12.2	8.8	
Column Total No.	82	91	173
Column Total %	47.4	52.6	100.0

χ^2 = 8; P = 0.0307; Cramer's V = 0.21; No. Missing = 45

Table 70.27(b) ENTREPRENEUR'S FIRST ACTIVITY AFTER SCHOOL BY SIZE OF FIRM BASED ON NO. OF EMPLOYEES WHEN PER ENTERPRISE WHEN OPERATIONAL

Entrepreneur's First Activity	Size of Firm		
	Small Business	Large Business	
	No.	No.	Total
	Row %	Row %	No.
	Col. %	Col. %	Row %
Salaried Job	97	19	116
	83.6	16.4	76.8
	75.8	82.6	
Started Own Business	14	1	15
	93.3	6.7	9.9
	10.9	4.3	
Family Business	2	2	4
	50.0	50.0	2.6
	1.6	8.7	
Other	15	1	16
	93.8	6.3	10.6
	11.7	4.3	
Column Total No.	128	23	151
Column Total %	84.8	15.2	100.0

χ^2 = 4; P = 0.1263; Cramer's V = 0.19; No. Missing = 67

Table 7A.2B ENTREPRENEUR'S AGE CATEGORY WHEN FIRST BUSINESS STARTED BY SIZE OF FIRM BASED ON NO. OF EMPLOYEES PER ENTERPRISE WHEN FIRM WAS OPERATIONAL

Age When First Business Started	Size of Firm		
	Small Business	Large Business	
	No. Row % Col. %	No. Row % Col. %	Total No. Row. %
Below 20 Years	7 70.0 5.4	3 30.0 13.0	10 6.6
21 to 30 Years	49 80.3 38.0	12 19.7 52.2	61 40.1
31 to 40 Years	39 84.8 30.2	7 15.2 30.4	46 30.3
41 to 50 Years	25 100.0 19.4		25 16.4
51 and Above	9 90.0 7.0	1 10.0 4.3	10 6.6
Column Total No.	129	23	152
Column Total %	84.9	15.1	100.0

$\chi^2 = 7$; P = 0.1179; Cramer's V = 0.22; No. Missing = 46

Table 7A.2B(b) AGE CATEGORY WHEN FIRST BUSINESS STARTED BY BASIC GROUP OF ORIGIN

Age When First Business Started	Entrepreneur's Basic Origin		
	Indigenous Zambian	Foreign Origin	
	No. Row % Col. %	No. Row % Col. %	Total No. Row. %
Below 20 Years	3 25.0 3.7	9 75.0 9.8	12 6.9
21 to 30 Years	31 46.3 38.3	36 53.7 39.1	67 38.7
31 to 40 Years	29 51.8 35.8	27 48.2 29.3	56 32.4
41 to 50 Years	13 48.1 16.0	14 51.9 15.2	27 15.6
51 and Above	5 45.5 6.2	6 54.5 6.5	11 6.4
Column Total No.	81	92	173
Column Total %	46.8	53.2	100.0

$\chi^2 = 3$; P = 0.5773; Cramer's V = 0.13; No. Missing = 45

Table 7A.29(a) ENTREPRENEUR'S AGE CLASSIFICATION IN 1986 BY SIZE OF FIRM BASED ON NO. EMPLOYEES PER ENTERPRISE WHEN OPERATIONAL

Age Classification	Size of Firm		
	Small Business	Large Business	
	No. Row % Col. %	No. Row % Col. %	Total No. Row %
21 to 30 Years	18 94.7 13.2	1 5.3 3.8	19 11.7
31 to 40 Years	47 82.5 34.6	10 17.5 38.5	57 35.2
41 to 50 Years	38 80.9 27.9	9 19.1 34.6	47 29.0
51 and Above	33 84.6 24.3	6 15.4 23.1	39 24.1
Column Total No.	136	26	162
Column Total %	84.0	16.0	100.0

χ^2 = 2; P = 0.3594; Cramer's V = 0.11; No. Missing = 56

Table 7A.29(b) ENTREPRENEUR'S AGE CLASSIFICATION - 1986 BY ENTREPRENEUR'S BASIC GROUP OF ORIGIN

Age Classification	Entrepreneur's Basic Origin		
	Indigenous Zambian	Foreign Origin	
	No. Row % Col. %	No. Row % Col. %	Total No. Row %
Below 20 Years	1 100.0 1.2		1 .6
21 to 30 Years	8 38.1 9.5	13 61.9 13.8	21 11.8
31 to 40 Years	37 56.1 44.0	29 43.9 30.9	66 37.1
41 to 50 Years	26 48.1 31.0	28 51.9 29.8	54 30.3
51 and Above	12 33.3 14.3	24 66.7 25.5	36 20.2
Column Total No.	84	94	178
Column Total %	47.2	52.8	100.0

χ^2 = 7; P = 0.1530; Cramer's V = 0.19; No. Missing = 40

Table 70.30 ENTREPRENEUR'S MARITAL STATUS BY ENTREPRENEUR'S SEX

MARITAL STATUS	ENTREPRENEUR'S SEX		
	MALE	FEMALE	
	No.	No.	Total
	Row %	Row %	No.
	Col. %	Col. %	Row %
MARRIED	121	12	133
	92.2	7.8	87.4
	90.4	63.2	
SINGLE	11	2	13
	84.6	15.4	7.4
	7.1	10.5	
OTHER	4	5	9
	44.4	55.6	5.1
	2.6	26.3	
Column Total No.	136	19	175
Column Total %	89.1	10.9	100.0

χ^2 = 29; P = 0.0000; Cramer's V = 0.34; No. Missing = 43

Table 70.31 ENTREPRENEUR'S BASIC ORGANISATION BEFORE OWNING BUSINESS BY ENTREPRENEUR'S BASIC GROUP OF ORIGIN

BASIC ORGANISATION BEFORE OWNING BUSINESS	Entrepreneur's Basic Origin		
	Indigenous Zambian Origin	Foreign Origin	
	No.	No.	Total
	Row %	Row %	No.
	Col. %	Col. %	Row %
FARMING		2	2
		100.0	1.2
		2.2	
GOVERNMENT	20	13	33
	60.6	39.4	19.5
	25.3	14.4	
PARASTATAL ORGANISATION	24	7	31
	77.4	22.6	18.3
	30.4	7.8	
MEDIUM OR LARGE PRIVATE ORGANISATION	21	40	61
	34.4	65.6	36.1
	26.6	44.4	
SMALL PRIVATE ORGANISATION	10	16	26
	38.5	61.5	15.4
	12.7	17.8	
OWN BUSINESS	4	11	15
	26.7	73.3	8.9
	5.1	12.2	
OTHER		1	1
		100.0	.6
		1.1	
Column Total No.	79	90	169
Column Total %	46.7	53.3	100.0

χ^2 = 24; P = 0.0006; Cramer's V = 0.37; No. Missing = 49

TABLE 7A.32 BUSINESSMAN'S FATHER'S BASIC EDUCATION BY RESPONDENT'S STATUS IN THE FIRM

Businessman's Father's Basic Education	Respondent's Status in the Firm: Business Owner No. / Row % / Col. %	Chief Executive No. / Row % / Col. %	Total No. / Row. %
None	28 / 87.5 / 19.4	4 / 12.5 / 23.5	32 / 19.9
Primary	58 / 93.5 / 40.3	4 / 6.5 / 23.5	62 / 38.5
Secondary & Above	58 / 86.6 / 40.3	9 / 13.4 / 52.9	67 / 41.6
Column Total No.	144	17	161
Column Total %	89.4	10.6	100.0

X^2 = 2; P = 0.4023; Cramer's V = 0.11; No. Missing = 57

TABLE 7A.33(a) ENTREPRENEUR'S FATHER'S BASIC EDUCATION BY ENTREPRENEUR'S BASIC EDUCATION LEVEL

Entrepreneur's Father's Basic Education	Entrepreneur's Basic Education: Primary & Below No. / Row % / Col. %	Secondary & Above No. / Row % / Col. %	Total No. / Row. %
None	8 / 28.6 / 42.1	20 / 71.4 / 16.0	28 / 19.4
Primary	11 / 19.0 / 57.9	47 / 81.0 / 37.6	58 / 40.3
Secondary & Above		58 / 100.0 / 46.4	58 / 40.3
Column Total %	13.2	86.8	100.0

X^2 = 16; P = 0.0003; Cramer's V = 0.33; No. Missing = 76

Table 7A.33(b) ENTREPRENEUR'S MOTHER'S BASIC EDUCATION BY ENTREPRENEUR'S BASIC EDUCATION LEVEL

Entrepreneur's Mother's Basic Education	Entrepreneur's Basic Education: Primary & Below No. / Row % / Col. %	Secondary & Above No. / Row % / Col. %	Total No. / Row. %
None	14 / 23.5 / 60.9	41 / 76.5 / 32.3	55 / 34.7
Primary	8 / 13.3 / 34.8	52 / 86.7 / 40.9	60 / 40.0
Secondary & Above	1 / 2.9 / 4.3	34 / 97.1 / 26.8	35 / 23.3
Column Total %	15.3	84.7	100.0

X^2 = 9; P = 0.0128; Cramer's V = 0.24; No. Missing = 68

TABLE 70.39 ENTREPRENEUR'S FATHER'S BASIC ORGANISATION
ENTREPRENEUR'S BASIC GROUP OF ORIGIN

Entrepreneur's Father's Basic Organisation	Entrepreneur's Basic Origin: Indigenous Zambian	Foreign Origin	Total
	No.	No.	No.
	Row %	Row %	Row %
	Col. %	Col. %	
FARMING	10	16	26
	41.7	58.3	14.5
	13.0	15.9	
GOVERNMENT	29	13	42
	69.0	31.0	23.5
	37.7	14.8	
PARASTATAL	11	3	14
	78.6	21.4	8.5
	14.3	3.4	
MINING / LARGE PRIVATE	8	9	17
	47.1	52.9	10.3
	10.4	10.2	
SMALL PRIVATE	3	11	14
	21.4	78.6	8.5
	3.9	12.5	
OWN BUSINESS	9	36	45
	20.0	80.0	27.3
	11.7	40.9	
OTHER	7	2	9
	77.8	22.2	5.5
	9.1	2.3	
Column Total No.	77	88	165
Column Total %	46.7	53.3	100.0

χ^2 = 34; P = 0.0002; Cramer's V = 0.46; No. Missing = 53

Table 70.39(b) ENTREPRENEUR'S FATHER'S BASIC OCCUPATION
ENTREPRENEUR'S BASIC GROUP OF ORIGIN

Entrepreneur's Father's Basic Occupation	Entrepreneur's Basic Origin: Indigenous Zambian	Foreign Origin	Total
	No.	No.	No.
	Row %	Row %	Row %
	Col. %	Col. %	
FARMING	13	15	28
	46.4	53.6	16.9
	16.9	16.9	
UNSKILLED / SEMI-SKILLED / SKILLED	19	10	29
	65.5	34.5	17.5
	24.7	11.2	
TEACHING: PRIMARY; SECONDARY,COLLEGE; UNIVERSITY	5	4	9
	55.6	44.4	5.4
	6.5	4.5	
OWN BUSINESS	8	37	45
	17.8	82.2	27.1
	10.4	41.6	
CLERICAL	16	12	28
	57.1	42.9	16.9
	20.8	13.5	
SUPERVISOR / MIDDLE / SENIOR MANAGEMENT	10	10	20
	50.0	50.0	12.0
	13.0	11.2	
OTHER	6	1	7
	85.7	14.3	4.2
	7.8	1.1	
Column Total No.	77	89	166
Column Total %	46.4	53.6	100.0

χ^2 = 25; P = 0.0003; Cramer's V = 0.39; No. Missing = 52

Table 7A.35(a) WHETHER ENTREPRENEUR'S FATHER OWNS A BUSINESS BY RESPONDENT'S STATUS IN THE FIRM

Whether Entrepreneur's Father Owns a Business	Respondent's Status in the Firm: Business Owner	Chief Executive	Total
No	No. Row % Col. %	85 92.2 47.7	7 7.8 30.4	No. Row % 92 46.7
Yes	No. Row % Col. %	91 85.0 52.3	16 15.0 69.6	No. Row % 107 54.3
Column Total	No. %	176 88.3	23 11.7	197 100.0

χ^2 = 2, P = 0.1594, Phi = 0.11, No. Missing = 21

Table 7A.35(b) WHETHER ENTREPR'S FATHER BY ENTREPRENEUR'S BASIC GROUP OF ORIGIN

Whether Entrepreneur's Father Owns a Business	Entrepreneur's Basic Origin: Indigenous Zambian	Foreign Origin	Total
No	No. Row % Col. %	23 30.1 30.1	58 69.9 63.7	No. Row % 85 47.7
Yes	No. Row % Col. %	58 63.7 69.9	33 36.3 36.3	No. Row % 91 52.3
Column Total	No. %	85 47.7	91 52.3	176 100.0

χ^2 = 18, P = 0.0000, Phi = 0.34, No. Missing = 44

Table 7A.35(C) ANOVA of Entrepreneur's Age When He Started Business By Whether Entrepreneur's Father Owns a Business

D E S C R I P T I O N O F S U B P O P U L A T I O N S

Criterion Variable ENTREPRENEUR'S AGE WHEN HE STARTED FIRST BUS.
Broken Down by WHETHER ENTREPR'S FATHER OWNS A BUSINESS

Whether Father Owns a Business	No.	Mean	Std Dev
For Entire Population	172	33	9.74
Yes	82	31	10.10
No	90	35	9.03

F = 8; P = 0.0058; Total No. 218; No. Missing = 46 or 21%

Table 7A.36 ENTREPRENEUR'S BASIC BIRTH PLACE BY ENTREPRENEUR'S BASIC GROUP OF ORIGIN

Entrepreneur's Basic Place of Birth	Entrepreneur's Basic Origin: Indigenous Zambian	Entrepreneur's Basic Origin: Foreign Origin	Total No. Row.
	No. Row % Col. %	No. Row % Col. %	
Zambia	82 74.5 87.6	28 25.5 30.1	110 62.1
Other African Countries	2 9.5 2.4	19 90.5 20.4	21 11.9
India / Parkistan / Srilanka		24 100.0 25.8	24 13.6
Europe / America		22 100.0 23.7	22 12.4
Column Total No.	84	93	177
Column Total %	47.5	52.5	100.0

X^2 = 88; P = 0.0000; Cramer's V = 0.68; No. Missing = 41

Table 7A.37(a) ENTREPRENEUR'S FATHER'S BASIC PLACE OF BIRTH BY ENTREPRENEUR'S BASIC GROUP OF ORIGIN

Entrepreneur's Father's Basic Place of Birth	Entrepreneur's Basic Origin		
	Indigenous Zambian	Foreign Origin	
	No. Row % Col. %	No. Row % Col. %	Total No. Row %
Zambia	80 97.6 95.2	2 2.4 2.2	82 46.6
Other African Countries	2 10.0 2.4	18 90.0 19.6	20 11.4
India / Pakistan / Srilanka	2 4.0 2.4	48 96.0 52.2	50 28.4
Europe / America		24 100.0 26.1	24 13.6
Column Total No.	84	92	176
Column Total %	47.7	52.3	100.0

I^2 = 153; P = 0.0000; Cramr's V = 0.93; No. Missing = 42

Table 7A.37(b) ENTREPRENEUR'S MOTHER'S BASIC PLACE OF BIRTH BY ENTREPRENEUR'S BASIC GROUP OF ORIGIN

Entrepreneur's Mother's Basic Place of Birth	Entrepreneur's Basic Origin		
	Indigenous Zambian	Foreign Origin	
	No. Row % Col. %	No. Row % Col. %	Total No. Row %
Zambia	81 97.6 96.4	2 2.4 2.2	83 47.2
Other African Countries	1 5.0 1.2	19 95.0 20.7	20 11.4
India / Pakistan / Srilanka	2 4.0 2.4	48 96.0 52.2	50 28.4
Europe / America		23 100.0 25.0	23 13.1
Column Total No.	84	92	176
Column Total %	47.7	52.3	100.0

I^2 = 157; P = 0.0000; Cramr's V = 0.94; No. Missing = 42

Table 78.38(a) ENTREPRENEUR'S FATHER'S BASIC PLACE LIVED MOST BY ENTREPRENEUR'S BASIC GROUP OF ORIGIN

Entrepreneur's Father's Basic Place Lived Most	Entrepreneur's Basic Origin: Indigenous Zambian	Foreign Origin	Total
	No. Row % Col. %	No. Row % Col. %	No. Row %
Zambia	77 68.8 93.9	35 31.3 38.5	112 64.7
Other African Countries	5 20.8 6.1	19 79.2 20.9	24 13.9
India / Pakistan / Srilanka		15 100.0 16.5	15 8.7
Europe / America		22 100.0 24.2	22 12.7
Column Total No.	82	91	173
Column Total %	47.4	52.6	100.0

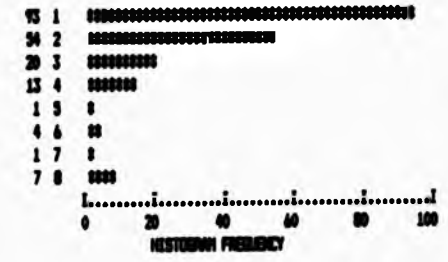
χ^2 = 61; P = 0.0000; Cramer's V = 0.59; No. Missing = 45

Table 78.38(b) ENTREPRENEUR'S MOTHER'S BASIC PLACE LIVED MOST BY ENTREPRENEUR'S BASIC GROUP OF ORIGIN

Entrepreneur's Mother's Basic Place Lived Most	Entrepreneur's Basic Origin: Indigenous Zambian	Foreign Origin	Total
	No. Row % Col. %	No. Row % Col. %	No. Row %
Zambia	78 69.0 95.1	35 31.0 38.5	113 65.3
Other African Countries	4 17.4 4.9	19 82.6 20.9	23 13.3
India / Pakistan / Srilanka		16 100.0 17.6	16 9.2
Europe / America		21 100.0 23.1	21 12.1
Column Total No.	82	91	173
Column Total %	47.4	52.6	100.0

χ^2 = 63; P = 0.0000; Cramer's V = 0.60; No. Missing = 45

Table 7A.39 Quartile Distribution of Number of Managers When Firm Obtained Manufacturing Licence

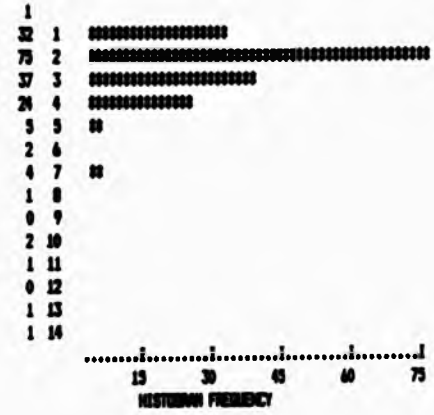


MEAN = 2.1 MEDIAN = 2 STD DEV = 1.6 MINIMUM = 1 MAXIMUM = 8

1st Quartile = 1 2nd Quartile = 2 3rd Quartile = 2

Total No. 193 No. Missing 23

Table 7A.40 Quartile Distribution of Present No. of Managers in Responding Firm



MEAN 2.8 MEDIAN 2.0 STD DEV 2 MINIMUM 0 MAXIMUM 14

1st Quartile = 2 ; 2nd Quartile = 2 ; 3rd Quartile = 3

No. = 186 No. Missing = 32

Table 7A.41 ANOVA Analysis of Number of Present Managers in in Responding Firm at the Time of the Study

D E S C R I P T I O N O F S U B P O P U L A T I O N S

Criterion Variable PRESENT No.OF MANAGERS IN RESPONDING FIRM
Broken Down by SIZE OF FIRM BASED ON NO. EMPLOYEES PER ENTERPRISE WHEN OPERATIONAL

Size of Firm	No.	Mean	Std Dev
For Entire Population	183	2.80	2.01
Small Business	144	2.40	1.47
Large Business	39	4.26	2.92

F = 30; P = 0.0000 Total No. 191; No. Missing = 23 or 12%

Table 7A.42 Quartile Distribution of Size of Top Management at the Time of the Study

```
COUNT   VALUE     ONE SYMBOL EQUALS APPROXIMATELY  2.00 OCCURRENCES

  31        1     ****************
  86        1     ******************************************************
  43        2     **********************
  17        3     *********
   4        4     **
   1        5     *
   1        6     *
   0        7
   0        8
   0        9
   1        0     *
                  I.........I.........I.........I.........I.........I
                  0         20        40        60        80        100
                            HISTOGRAM FREQUENCY
```

MEAN 1.4 MEDIAN 1 STD DEV 1.2 MINIMUM 0 MAXIMUM 10

1st Quartile = 1 ; 2nd Quartile = 1 ; 3rd Quartile = 2

Total No. 184 No. Missing 34

Table 7A.43 ANOVA Analysis of Number of Managers Reporting to Top Management

DESCRIPTION OF SUBPOPULATIONS

Criterion Variable: No.OF MANAGERS RESPONSIBLE TO OWNER
Broken Down by: SIZE OF FIRM BASED ON NO. OF EMPLOYEES PER ENTERPRISE WHEN OPERATIONAL

Size of Firm	No.	Mean	Std Dev
For Entire Population	181	1.41	1.22
Small Business	142	1.27	1.20
Large Business	39	1.72	1.16

F = 9; P = 0.0027 Total No. 218; No. Missing = 37 or 17%

Table 7A.44 ANOVA Analysis of Average Capital Investment per Job

DESCRIPTION OF SUBPOPULATIONS

Criterion Variable: AVERAGE INITIAL CAPITAL INVESTED PER JOB '000s
Broken Down by: SIZE OF FIRM BASED ON NO. OF EMPLOYEES PER PER ENTERPRISE WHEN OPERATIONAL

Size of Firm	No.	Mean (in 000s)	Std Dev
For Entire Population	177	39	85
Small Business	139	40	86
Large Business	38	39	72

F = 0047; P = 0.9455 Total No. 218; No. Missing = 41 or 19%

Table 7A.45 ANOVA Analysis of Asset Investment per Job (K'000s)

DESCRIPTION OF SUBPOPULATIONS

Criterion Variable: AVERAGE ASSET INVEST PER JOB (K'000s)
Broken Down by: SIZE OF FIRM BASED ON NO. OF EMPLOYEES PER ENTERPRISE WHEN OPERATIONAL

Size of Firm	No.	Mean	Std Dev
For Entire Population	144	18	47
Small Business	117	16	46
Large Business	27	28	53

F = 1.3; P = 0.2556 Total No. 191; No. Missing = 74 or 34%

Table 7A.46 ANOVA Analysis of Average Profit per Employee (K'000s)

DESCRIPTION OF SUBPOPULATIONS

Criterion Variable: AVERAGE PROFIT PER EMPLOYEE (in K'000s)
Broken Down by: SIZE OF FIRM BASED ON NO. OF EMPLOYEES PER ENTERPRISE WHEN OPERATIONAL

Size of Firm	No.	Mean	Std Dev
For Entire Population	129	5.46	9.03
Small Business	104	4.86	8.86
Large Business	25	7.96	9.48

F = 2.4; P = 0.1233 Total No. 218; No. Missing = 89 or 41%

Table 8A.1 Differences in Mean number of employees in graduate's organisation between BBA and BAc

D E S C R I P T I O N O F S U B P O P U L A T I O N S

Criterion Variable No. OF EMPLOYEES IN ORGANISATION IN 1985
Broken Down by GRADUATE'S TYPE OF SBIS DEGREE

Type of Degree	No.	Mean	Std Dev
For Entire Population	178	2969	9401
Business Administration (BBA)	43	912	1300
Accountancy (BAc)	135	3624	10697

F = 3; P = 0.0996 Total No. 254; No. Missing = 76 or 30%

Table 8A.2 Differences of Mean number of employees in graduate's employing organisation according to basic year of graduation from SBIS

D E S C R I P T I O N O F S U B P O P U L A T I O N S

Criterion Variable No. OF EMPLOYEES IN ORGANISATION IN 1985
Broken Down by BASIC YEAR OF GRADUATION FROM SBIS

Basic Year of Graduation	No.	Mean	Std Dev
For Entire Population	176	3000	9450
1981 to 1982	80	2999	10260
1983 to 1984	70	2579	7770
1985 to 1986	46	3639	10772

F = .17; P = 0.8 Total No. 254; No. Missing = 78 or 31%

Table 8A.3 Basic present job description by Year of graduation

Basic Job Description	Basic Year of Graduation			
	1981 to 1982	1983 to 1984	1985 to 1986	
	No. Row % Col. %	No. Row % Col. %	No. Row % Col.%	Total No. Row %
Departmental Orientation	5 20.0 7.0	8 32.0 9.6	12 48.0 17.6	25 11.3
Posting Books of Accounts; Preparation of Trial Balances & Reports	13 26.0 18.3	17 34.0 20.5	20 40.0 29.4	50 22.5
Auditing	5 19.2 7.0	15 57.7 18.1	6 23.1 8.8	26 11.7
Assisting Accountants	4 26.7 5.6	7 46.7 8.4	4 26.7 5.9	15 6.8
Clerical, Broking Selling & Administration	1 10.0 1.4	2 20.0 2.4	7 70.0 10.3	10 4.5
Departmental or Branch Supervision	30 47.6 42.3	23 36.5 27.7	10 15.9 14.7	63 28.4
Other	13 39.4 18.3	11 33.3 13.3	9 27.3 13.2	33 14.9
Column Total No. Column Total %	71 32.0	83 37.4	68 30.6	222 100.0

χ^2 = 27; P = 0.0044; Cramr's V = 0.23; No. Missing = 32

Table 8A.4 Basic present job description By type of BBIS degree

Basic Job Description	Type of Degree		
	Business Accountancy Admin. (B.A)	(BAc)	
	No. Row % Col. %	No. Row % Col. %	Total No. Row %
Departmental Orientation	5 19.2 8.5	21 80.8 12.4	26 11.4
Posting Books of Accounts Preparation of Trial Balances & Reports	2 3.9 3.4	49 96.1 29.0	51 22.4
Auditing	1 3.6 1.7	27 96.4 16.0	28 12.3
Assisting Accountants	1 6.7 1.7	14 93.3 8.3	15 6.6
Clerical, Broking Selling & Administration	6 54.5 10.2	5 45.5 3.0	11 4.8
Departmental or Branch Supervision	31 49.2 52.5	32 50.8 18.9	63 27.6
Other	13 38.2 22.0	21 61.8 12.4	34 14.9
Column Total No. Column Total %	59 25.9	169 74.1	228 100.0

χ^2 = 49; P = 0.0000; Cramr's V = 0.46; No. Missin

Table 88.5 Main reason for wishing to leave present job
By Graduate's type of UBIS degree

Main Reason for Wishing to Leave Job	Type of Degree		
	Business Admin. (B.A)	Accountancy (Bsc)	
	No.	No.	Total
	Row %	Row %	No.
	Col. %	Col. %	Row. %
Greener Pastures	23	76	99
	23.2	76.8	59.6
	52.3	62.3	
To Start Own Business	6	8	14
	42.9	57.1	8.4
	13.6	6.6	
Travel / Emigrate	1	2	3
	33.3	66.7	1.8
	2.3	1.6	
Job or Organisation Frustration	14	36	50
	28.0	72.0	30.1
	31.8	29.5	
Column Total No.	44	122	166
Column Total %	26.5	73.5	100.0

χ^2 = 3; P = 0.4083; Cramer's V = 0.1; No. Missing = 88

Table 88.6 Main reason for wishing to leave present job
by basic year of graduation from UBIS

Main Reason for Wishing to Leave Job	Basic Year of Graduation			
	1981 to 1982	1983 to 1984	1985 to 1986	
	No.	No.	No.	Total
	Row %	Row %	Row %	No.
	Col. %	Col. %	Col.%	Row. %
Greener Pastures	33	33	30	98
	33.7	33.7	30.6	59.8
	58.9	56.5	65.2	
To Start Own Business	5	7	2	14
	35.7	50.0	14.3	8.5
	8.9	11.3	4.3	
Travel / Emigrate	1	1	1	3
	33.3	33.3	33.3	1.8
	1.8	1.6	2.2	
Job or Organisation Frustration	17	19	13	49
	34.7	38.8	26.5	29.9
	30.4	30.6	28.3	
Column Total No.	56	62	46	164
Column Total %	34.1	37.8	28.0	100.0

χ^2 2; P = 0.9233; Cramer's V = 0.1; No. Missing = 90

Table 88.7 Graduate's basic type of first organisation
By graduate's basic type of new organisation next week

Graduate's Basic Type of First Organisation	Graduate's Basic New Organisation Next Week				
	Government	Medium / Large Private & Parastatals	Small Private	Own Business	
	No.	No.	No.	No.	Total
	Row %	Row %	Row %	Row %	No.
	Col. %	Col. %	Col.%	Col.%	Row. %
Government	5	46	6	3	60
	8.3	76.7	10.0	5.0	26.8
	55.6	25.6	40.0	15.0	
Medium / Large Private & Parastatals	2	129	7	17	155
	1.3	83.2	4.5	11.0	69.2
	22.2	71.7	46.7	85.0	
Small Private	2	5	2		9
	22.2	55.6	22.2		4.0
	22.2	2.8	13.3		
Colum Total No.	9	180	15	20	224
Colum Total %	4.0	80.4	6.7	8.9	100.0

χ^2 = 22; P = 0.0013; Cramer's V = 0.2; No. Missing = 30

Table 88.8 Graduate's basic new organisation next week by graduate's type of BBIS degree

New Organisation Next Week	Type of Degree		
	Business Admin. (B.A)	Accountancy (BAc)	
	No.	No.	Total
	Row %	Row %	No.
	Col. %	Col. %	Row. %
Government	3	6	9
	33.3	66.7	3.7
	4.8	3.3	
Medium / Large Private & Parastatals	57	143	200
	28.5	71.5	81.6
	90.5	78.6	
Small Private		16	16
		100.0	6.5
		8.8	
Own Business	3	17	20
	15.0	85.0	8.2
	4.8	9.3	
Colum Total No.	63	182	245
Colum Total %	25.7	74.3	100.0

χ^2 = 8; P = 0.0077; Cramer's V = 0.2; No. Missing = 9

Table 8A.9 Basic type of new job if graduate left next week by graduate's type of SBIS degree

Basic Type of new Job Next Week	Type of Degree: Business Admin. (B.A) No. Row % Col. %	Accountancy (BAc) No. Row % Col. %	Total No. Row %
Accountant	11 / 7.3 / 25.6	140 / 92.7 / 85.4	151 / 72.9
Management Job	30 / 68.2 / 69.8	14 / 31.8 / 8.5	44 / 21.3
Own Business Firm	2 / 16.7 / 4.7	10 / 83.3 / 6.1	12 / 5.8
Column Total No.	43	164	207
Column Total %	20.8	79.2	100.0

I^2 = 77; P = 0.0000; Cramer's V = 0.4; No. Missing = 47

Table 8A.10 Type of new job if graduate left next week by basic year of graduation from SBIS

Basic Type of New Job Next Week	Basic Year of Graduation: 1981 to 1982 No. Row % Col. %	1983 to 1984 No. Row % Col. %	1985 to 1986 No. Row % Col.%	Total No. Row %
Accountant	41 / 28.5 / 68.3	49 / 34.0 / 72.1	54 / 37.5 / 77.1	144 / 72.7
Management Job	15 / 34.9 / 25.0	16 / 37.2 / 23.5	12 / 27.9 / 17.1	43 / 21.7
Own Business Firm	4 / 36.4 / 6.7	3 / 27.3 / 4.4	4 / 36.4 / 5.7	11 / 5.6
Column Total No.	60	68	70	198
Column Total %	30.3	34.3	35.4	100.0

I^2 = 2; P = 0.7864; Cramer's V = 0.1; No. Missing = 56

Table 8A.11 Graduate's new job in same industry as now by graduate's type of SBIS degree

New Job in the Same Industry as Now	Type of Degree: Business Admin. (B.A) No. Row % Col. %	Accountancy (BAc) No. Row % Col. %	Total No. Row %
No	28 / 23.0 / 49.1	94 / 77.0 / 55.3	122 / 53.7
Yes	29 / 28.4 / 50.9	73 / 71.6 / 42.9	102 / 44.9
Any		3 / 100.0 / 1.8	3 / 1.3
Column Total No.	57	170	227
Column Total %	25.1	74.9	100.0

I^2 = 2; P = 0.4; Cramer's V = 0.1; No. Missing = 27

Table 8A.12 Graduate's new job in same industry as now by basic year of graduation from SBIS

New Job in the Same Industry as Now	Basic Year of Graduation: 1981 to 1982 No. Row % Col. %	1983 to 1984 No. Row % Col. %	1985 to 1986 No. Row % Col.%	Total No. Row %
No	34 / 28.8 / 47.9	43 / 36.4 / 52.4	41 / 34.7 / 60.3	118 / 53.4
Yes	36 / 36.0 / 50.7	38 / 38.0 / 46.3	26 / 26.0 / 38.2	100 / 45.2
Any	1 / 33.3 / 1.4	1 / 33.3 / 1.2	1 / 33.3 / 1.5	3 / 1.4
Column Total No.	71	82	68	221
Column Total %	32.1	37.1	30.8	100.0

I^2 = 2; P = 0.4864; Cramer's V = 0.07; No. Missing = 33

CHAPTER 8 APPENDIX EXHIBITS ON SBIS DEGREE CURRICULA

Exhibit 8A1 SBIS OLD CURRICULUM[1]

Common Courses for both Accounting and Business Administration Programmes

Year I

BS	110	_	Introduction to Economics
BS	120	_	Introduction to Accounting
BS	130	_	Business and its Environment
BS	140	_	Introduction to Mathematics and Statistics
BS	150	_	Nature and Functions of Management

Year II

BS	210	_	Macro and Micro Economic Policy and Analysis
BS	220	_	Principles of Accounting
BS	230	_	Organisational Behaviour
BS	240	_	Business Mathematics and Statistics
BS	290	_	Business Law

Specialist Courses for Accounting and Business Administration

Year III

BS	320	_	Intermediate Accounting
BS	321	_	Financial Management
BS	322	_	Cost Accouting
BS	340	_	Quantitative Methods and Computers
BS	390	_	Company Law and Taxation

Year III Business Administration

BS	310	_	Managerial Economics
BS	321	_	Financial Management
BS	340	_	Quantitative Methods and Computers
BS	360	_	Production Management
BS	370	_	Marketing Management
BS	380	_	Personnel Management and Industrial Relations

Footnotes:

[1]This curriculum was in use at the time of the study. It was continued until all students admitted to 1983/84 had graduated

Year IV Accounting

BS 420 _ Advanced Accounting
BS 421 _ Auditing
BS 422 _ Investment Management
BS 423 _ Management Accounting
BS 450 _ Business Policy and Decision Making

Year IV Business Administration

BS 424 _ Managerial Accounting
BS 450 _ Business Policy and Decision Making
Three Electives

Electives

(a) *Marketing Management*

BS 470 _ Marketing Research
BS 471 _ International Trade and Business
BS 472 _ Sales Management

(b) *Production Management*

BS 460 _ Production Planning and Controll
BS 461 _ Purchasing and Material Management
BS 462 _ Statistical Quality Control

(c) *Personnel Management*

BS 480 _ Industrial Relations
BS 481 _ Trade Unions and Labour Legislation

(d) *Financial Management*

BS 422 _ Investment Management
BS 425 _ Taxation and Business - Government Relations

Exhibit 8A2 SBIS REVISED CURRICULUM[2]

Common Courses for both Accounting and Business Administration Programmes

Year I

BS	110	_	Principles of Economics
BS	120	_	Principles of Accounting
BS	130	_	Business Environment and Communication
BS	140	_	Mathematical Analysis
BS	150	_	Principles of Management

Year II

BS	210	_	Intermediate Economic Theory, Policy and Analysis
BS	220	_	Principles of Managerial and Cost Accounting
BS	240	_	Introduction to Data Processing
BS	241	_	Quantitative Business Analysis
BS	270	_	Principles of Marketing

Specialist Courses for Accounting and Business Administration

Year III

BS	320	_	Intermediate Accounting
BS	321	_	Corporate Finance and Investment Management
BS	322	_	Advanced Managerial and Cost Accounting
BS	360	_	Production and Operation Management
BS	390	_	Company Law and Taxation

Footnotes:

[2] The new syllabi was introduced in the 1983/84 academic year. The first graduates from the new syllabi qualified in 1987. The old syllabi was continued until all students admitted prior to 1983/84 had graduated.

Year IV Accounting

Two tracks, viz professional and financial, are offered to the students. The professional track is restricted to students who obtained at least an overall 'B' average in BS 120, Bs 220, BS 320, BS 321 and BS 322.

(a) Professional track

BS 420 _ Advanced Accounting
BS 421 _ Auditing
BS 422 _ Seminar in Accounting
BS 450 _ Business Policy and Strategy
One Elective
Internship in Accounting (see table 12A2.4)

(b) Financial track

BS 420 _ Advanced Accounting
BS 450 _ Business Policy and Strategy
Three Electives

Year IV Business Administration

BS 430 _ Organisation Theory and Behaviour
BS 450 _ Business Policy and Strategy
Three Electives

Electives[3]

(For both programmes; if not included otherwise)

Area I: Accounting

BS 422 _ Seminar in Accounting
BS 423 _ Government and Bank Accounting

Area II: Economics

BS 410 _ Economic Development
BS 411 _ Comparative Economic Systems
BS 412 _ International Business
BS 413 _ International Trade and Finance
BS 414 _ Money and Banking

Area III: Financial Management

BS 424 _ Taxation and Business - Government Relations
BS 425 _ Risk Management and Insurance
BS 428 _ Seminar in Finance

Footnotes:
[3] The selection of an elective is subject to the approval of the Head of Department.

Area IV: Management

BS 431 _ Analysis of Behavioural Systems
BS 451 _ Small Business Management
BS 452 _ Seminar in Management

Area V: Marketing Management

BS 470 _ Marketing Research
BS 471 _ International Marketing
BS 472 _ Sales Management
BS 473 _ Marketing Channels

Exhibit 8A3 DEGREE PROGRAMME IN ACCOUNTANCY (BAc) AND BUSINESS ADMINISTRATION (BBA)

COURSE DESCRIPTION

BS 110: *Principles of Economics*

An introductory course in micro and macro economic analysis with particular emphasis on contemporary issues.

BS 120: *Principles of Accounting*

An introductory course in the methods of recording, summarising and presenting financial information which is used in business organisations.

BS 130: *Business Environment and Communication*

A broadly based course to familiarise students with the type of communication used in business and various environmental influences on effective management.

BS 140: *Mathematical Analysis*

An introductory course in fundamental mathematical techniques used in business and financial analysis.

BS 150: *Principles of Management*

An introductory course in general management with special emphasis on the Zambian context.

BS 210: termidiate Economic Theory, policy and Analysis

This course builds on the theoretical foundation of BS 110, and focusses students' attention of the particular problems of developing countries.

BS 220: *Principles of Managerial and Cost Accounting*

An introductory course in costing methods and their application to management planning and control.

BS 240: *Introduction to Data Processing*

An introductory course in the use computer techniques applied to the solution of business problems.

BS 241: *Quantitative Business Analysis*

An introductory course in the use of statistical analysis as applied to business and economic problems.

BS 270: *Principles of Marketing*

An introductory course in marketing concepts and the methods used to promote marketing functions.

BS 290: *Business Law*

This course provides students with a knowledge of the basic principles of law affecting business relationships and transactions.

BS 310: *Managerial Economics*

This course comprises an economic approach to assessing the feasibility of alternative managerial decisions.

BS 320: *Intermediate Accounting*

This course builds on the foundation of BS 120, and introduces the students to the specialist areas of financial accounting.

BS 321: *Corporate Finance and Investment Management*

This course provides an understanding of the problems involved in both managing corporate finance and evaluating investment projects.

BS 322: *Advanced Managerial and Cost Accounting*

This course builds on the foundation of BS 220 and is designed to enhance students' ability to select and prepare cost data for managerial decision making.

BS 360: *Production and Operations Management*

This course provides an understanding of analytical techniques used in making production oriented business decisions.

BS 370: *Marketing Management*

This course builds on the foundation of BS 270 and provides students with knowledge of marketing problems and solutions with special emphasis on the Zambian situation.

BS 380: *Personnel Administration and Labour Relations*

This course provides specialist knowledge of the techniques of human resource management with particular emphasis on labour relations in Zambia.

BS 390: *Company Law and Taxation*

This course provides a comprehensive knowledge of company and tax legislation and its impact on business firms.

BS 420: *Advanced Accounting*

This course is an extension of BS 320 in which students acquire an in depth knowledge of advanced topics in financial accounting.

BS 421: *Auditing*

This course provides knowledge of the audit concepts, techniques and procedures designed to assess the financial position of business organisations.

BS 422: *Seminar in Accounting*

The seminar in accounting is designed in order to survery and analyse contemporary issues in the accounting profession.

BS 430: *Organisation Theory and Behaviour*

This course is intended to provide an understanding of the relationships between individuals, groups and organisations, and how these relationships influence behaviour.

BS 450: *Business Policy and Strategy*
This course is designed to bring together specialist

areas of management, accounting and finance already introduced to students in order to show them the interdisciplinary nature of long term business planning.

ELECTIVES

BS 410: *Economic Development*

This course gives students the opportunity to learn about the economic problems faced by developing countries and policies which are used to combat them.

BS 411: *Comparative Economic Systems*

This course enhances students' knowledge of the different economic systems which exist in the world and the impact of each on the management of business organisations.

BS 412: *International Business*

This course is designed to enhance students' knowledge in multinational business and direct foreign investment.

BS 413: *International Trade and Finance*

This course deals with commercial policies which affect international trade and the international monetary system.

BS 414: *Money and Banking*

This course is designed to enhance students' knowledge of the interrelationship between economic theory and the activities of the banking system with special reference to the Zambian situation.

BS 422: *Seminar in Accounting*
See Course description above.

BS 423: *Government and Bank Accounting*

This course gives a background to the financial measures and procedures used in the running of government and banking institutions.

BS 424: *Taxation and Business-Government Relations*

This course provides knowledge of how managerial

decisions may be affected by tax policy and legislation, and how business may be influenced by other government agencies.

BS 425: *Risk Management and Insurance*

This course is designed to provide an understanding of the risks involved in business and the methods and institutions developed to deal with them.

BS 426: *Seminar in Finance*

The purpose of the seminar in finance is to survey and analyse contemporary issues in financial management.

BS 431: *Analysis of Behavioural Systems*

This course is designed to enhance students' ability to assess social and psychological impact of alternative organisational systems.

BS 451: *Small Business Management*

This course aims to make students aware of the particular problems faced by small business enterprises and how these may be overcome with special reference to the Zambian environment.

BS 452: *Seminar in Management*

The seminar in management is designed in order to survey and analyse contemporary issues in management theory and practive.

BS 470: *Marketing Research*

This course provides students with the necessary techniques to solve the marketing research problems experienced in Zambia.

BS 471: *International Marketing*

This course provides students with a knowledge of the particular marketing problems encountered by organisations operating outside their home countries, with special reference to international co-operation in Zambia.

BS 472: *Sales Management*
This course seeks to provide an understanding of the policies and strategies employed by management to stimulate sales and sales people.

BS 473: *Marketing Channels*

This course is designed to enhance students' knowledge of advanced techniques in distribution and communication.

Exhibit 8A4 ASSESSMENT OF STUDENTS' PERFORMANCE

Students' performance is evaluated in each subject by a system of continuous assessment and the result of a final examination at the end of the academic year. The individual lecturer informs the students at the beginning of the academic year about the particulars of the evaluation procedure in his course. In general fifty percent of the final marks to be obtained in a subject are based on the results of the continuous assessment and fifty percent on the outcome of the final examination.

In seminars the participants' performance is appraised by combining the results of a continuous evaluation and the quality of a paper, which has to be produced in the course of the academic year.

In order to graduate as a Bachelor of Business Administration or a Bachelor of Accountancy (Financial Track) a student must complete all compulsory courses and the prescribed number of electives.

In order to graduate as a Bachelor of Accountancy (Professional Track) a student must, in addition to the completion of his course programme, successfully participate in a practical internship programme during the long vacation after the second and the third year of his studies.

xhibit 8A5 The Copperbelt Registrar's Announcement on Boycott of Classes Due to Incompetent lecturers

THE UNIVERSITY OF ZAMBIA AT NDOLA

ANNOUNCEMENT

FROM : The University Administration at Ndola

TO : All Students at UNZANDO

DATE : 23rd January, 1985

SUBJECT : ANNOUNCEMENT OF DECISIONS BY THE UNIVERSITY ADMINISTRATION IN RESPONSE TO THE BOYCOTT OF CLASSES BY ALL UNZANDO STUDENTS COMMENCING ON MONDAY 21ST JANUARY, 1985, FOLLOWED SUBSEQUENTLY BY A SPECIFICATION BY UNZASU ON TUESDAY, 22ND JANUARY 1985 OF THE REASONS WHY THE STUDENTS WERE BOYCOTTING CLASSES

For the decisions made by the University Administration, as subsequently elaborated in this document to be adequately contextualized, a brief chronology of the most recent events are first in order. A small group of the UNZASU Executive Committee (UNZANDO) travelled to Lusaka during the weekend prior to 14th January, 1985 to have discussions with the Vice-Chancellor. In the event, because the Vice-Chancellor, Dr. Jacob M. Mwanza, was on leave, they met with the Acting Vice-Chancellor, Professor Ben Mweene, on Monday 14th January and again on Wednesday, 16th January, 1985. After ascertaining and satisfying himself that the issues being brought to him had not been presented formally to the UNZANDO Principal for formal discussion, the Acting Vice-Chancellor advised the student representatives to return to Kitwe to present their case to their Principal in accordance with established procedures. The student representatives duly returned to Kitwe bolstered by the promise by the Acting Vice-Chancellor that they might be able, with his assistance, to see the Principal at 14.30 hrs on Thursday, 17th January, 1985. Unfortunately, as things turned out, the Principal, unknown to the Acting Vice-Chancellor, had a prior important meeting arranged with senior academic and administrative staff of the campus and he was therefore unable to meet with them on Thursday. Immediate arrangements were, however, made to meet with him and other academic and senior administrative staff on Friday, the next day, at 14.00 hrs after a morning staff meeting of the School of Business and Industrial Studies.

The student representatives duly met with the Principal at the appointed hour. At this meeting the student representatives outlined the purpose of their trip to Lusaka and what they had discussed with the Acting Vice-Chancellor. These

included the issue of student allowances, alleged (by students in affected classes) incompetence and/or misplacement of certain academic teaching staff, suspension of seven students in BS 472, and other related issues. After a lengthy discussion that lasted from 14.00 hrs to 17.30 hrs, the student representatives were told that the conclusions of the meeting and the message they should take to the entire body were:

(a) that in regard to the suspension by the Dean of the School of Business and Industrial Studies of the seven students in BS 472, administrative channels of communication were still open for them to appeal to the Principal for their case to be heard. The student representatives were told that suspensions were strictly a disciplinary matter and that the only way they could be resolved was that the affected students, in their individual capacity should appeal to the next higher authority. It was stressed that this was not at all a cause to be championed by UNZASU because it was not UNZASU as a Union that had been suspended but specific individual students,

(b) that in regard to the alleged incompetence and/or misplacement of lecturers in BS 472 and BS 422, the School of Business and Industrial Studies at its meeting of Friday, 18th January 1985, had agreed to look into the allegations and to this end had formed an investigative committee with the terms of reference of making appropriate recommendations. Until this was done, lecturers could not be moved around at the mere say-so of students.

The meeting closed with the understanding that this was at this stage the response of the University Administration, with the expectation on the part of the University Administration that there would be an appropriate response to its stand. The response came on Monday, 21st January, 1985. It came in the form of a general boycott of classes by the entire student body. This boycott came totally unsuspected and unanticipated by the University Administration because what had been hoped for after the meeting with UNZASU on Friday was a response to the two specific stances assumed by the University Administration, that is as concerned student suspensions and removal of lecturers from BS 472 and BS 422.

With this completely new turn of events, the University Administration at its meeting on the morning of Monday, 21st January, 1985, felt compelled and considered it imperative to ascertain from the entire student body what were precisely the grounds for the general boycott of classes. The Administration considered it as most important that the precise grounds for the boycott had to be ascertained and established first otherwise there was the danger that whatever response the University Administration might give could omit one important area of student dissatisfaction. Accordingly, a memorandum was prepared and addressed to all the students, in their individual capacity, to inform the University Administration, through their student representatives, what the grounds for their boycott were. In the morning of Tuesday, 22nd January, 1985, a comprehensive list of the areas of student dissatisfaction was received by the University Administration. This was fully discussed by the Administration at a meeting which commenced at 14.00 hrs and closed at 17.00 hrs on 22nd January 1985.

What follow now are decisions of the University Administration in respect of each of the major issues raised in the submission by UNZASU. These may be telescoped into three broad categories:

(1) Suspension of seven students in BS 472
(2) Alleged incompetence and/or misplacement of lecturers in both the Schools of Environmental and Business and Industrial Studies
(3) Shortage of textbooks and Library books

1. <u>Suspension of seven students in BS 472</u>

It must be stated as a primary point that the decision to suspend seven students from the course in BS 472 was proper and correct as it was based on prevailing University Council and Senate regulations. However, in the greater good and in the overriding interest of enabling hundreds of innocent students now unnecessarily affected by the general boycott of classes to return to the classroom, the Principal has seen it fit to lift with immediate effect the suspension of all the seven students (i.e. both those who appealed and those who did not appeal). The primary consideration here is that continued boycott of classes is neither what the University Administration nor the nation nor indeed the students themselves desire as this denies the student the benefit of education which is the sole and main reason she or he is in the University.

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The crucial significance of the lifting of the suspension is that the students in question are now free to return to BS 472 and resume classes.

2. Alleged incompetence and/or misplacement of lecturers

In the first instance it must be established and appreciated as a basic principle of university education that the decision as to who teaches who and in what subject is the responsibility and prerogative of those best qualified and competent to make decisions on these crucial matters and these are the teaching staff appointed to administer schools or faculties. Thus, in direct response to demands by students to have certain lecturers removed from the courses for which they have been appointed to be responsible by the respective School Administration, the following are the decisions of the University Administration:

(i) Demand to have the Lecturer in BS 472 removed

It is the decision of the University Administration that the Lecturer in BS 472 will continue to be responsibel for that course until such a time that the School of Business and Industrial Studies is in a position to make alternative allocation of its teaching resources. However, even in the meantime, as is the practice in other courses in the schools in the University, the School of Business and Industrial Studies, in addition to the contribution by the Lecturer, may draw on the services of other specialist lecturers in order to enrich the teaching inputs in BS 472.

(ii) Demand to have the Lecturer in BS 422 removed

As in BS 472 it has been decided that the Lecturer presently responsible for BS 422 will continue to be in charge of that course. The truth, and therefore the crux, of the matter here is that even if the allegations of incompetence levelled against the Lecturer were proved to be true, which they have not, the present teaching resources of the School are such that it would not be possible to find an immediate replacement for the Lecturer as he is the only specialist at present in this area.

(iii) Demand for removal of additional Lecturers as listed and specified in the undated (but 22nd January 1985) UNZASU submission

In the UNZASU submission, the demand is for the removal of

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additional lecturers from their present classes, a total of 3 in the School of Environmental Studies, and a total of 2 in the School of Business and Industrial Studies. Thus, all in all, if the demand for the removal of lecturers in BS 472 and BS 422 is taken into account, the number of lecturers to be removed or re-allocated come to 7. Quite apart from the fact that a demand for the removal of such a large number of lecturers is tantamount to a demand suggesting the virtual closure of the campus as this amounts to a wholesale condemnation of the lecturers presently recruited, the issues raised in the UNZASU submission are being brought up for the first time and have thus not received the attention of the schools concerned. It is in this light that it has been decided that these particular issues must first be brought to the attention of the schools in the normal way before appropriate measures can be considered.

2. Shortage of textbooks and library books

The difficulties presently being experienced in the procurement of both textbooks and library books must be perceived, understood and appreciated within the context of the general problem relating to inadequate availability of foreign currency reserves now facing the entire nation. These makes it difficult for the desired imports, including textbooks and library books, to be purchased abroad and brought into the country.

However, largely through the assistance of donor agencies, the library stock situation has appreciably improved since the establishment of the campus in 1978. This is particularly the case as regards the School of Business and Industrial Studies, although even here a great deal of room remains for improvement. The problem is more acute concerning the newer School of Environmental Studies. In recognition of this a deliberate decision has already been made to give priority to the procurement of library resources for this school.

In order to facilitate the procurement of textbooks, two practical, administrative steps have been taken. The University Council has approved the creation of two keys posts, namely that of Bookshop Manager, and that of Imports, Customs and Passages Officer. The latter assumed duty in December 1984 and the former in November 1983. With the cooperation of the authorities responsible for the

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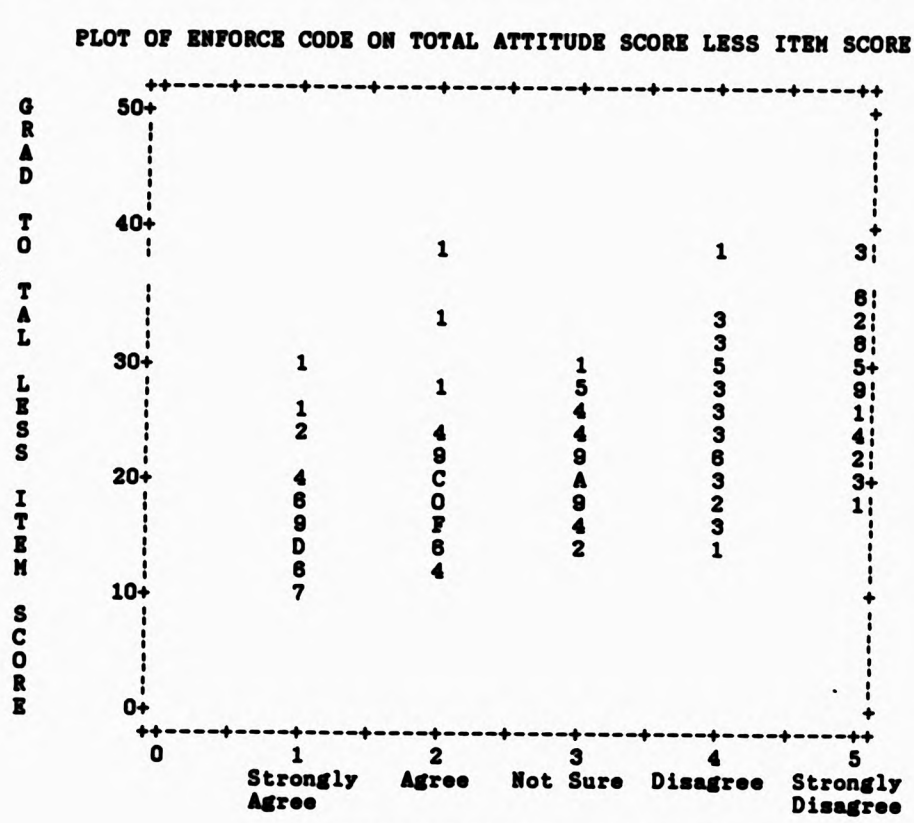
allocation of foreign exchange, it is hoped that with the appointment of these key officers, there will be a visible improvement in the acquisition of textbooks and library books.

C.M. Muyangana
REGISTRAR

c.c. Chairman, University Council
c.c. Vice-Chancellor
c.c. Deputy Vice-Chancellor
c.c. University Secretary
c.c. Principal, UNZANDO
c.c. Deans of Schools, UNZANDO
c.c. Dean of Students, UNZANDO

/bmc

Figure 9A.1 Plot of Graduates' Item Analysis of Leadership Code



Total No. plotted: 254

Size of the plots :

Horizontal size is 50
Vertical size is 25

Key to: Frequencies and symbols used in the Plot:

1 - 1	11 - B	21 - L	31 - V
2 - 2	12 - C	22 - M	32 - W
3 - 3	13 - D	23 - N	33 - X
4 - 4	14 - E	24 - O	34 - Y
5 - 5	15 - F	25 - P	35 - Z
6 - 6	16 - G	26 - Q	36 - *
7 - 7	17 - H	27 - R	
8 - 8	18 - I	28 - S	
9 - 9	19 - J	29 - T	
10 - A	20 - K	30 - U	

Table 9A.1(b) Matrix of Pearson correlation of each item with all other items for graduates

CODE STATEMENT	NO.	MEAN	STD DEV
NO BUSINESS	254	2.59	1.39
NO SUBLETTING	254	2.43	1.31
DISPOSE PROPERTY	254	2.15	1.16
ALLOW FAMILY	254	2.39	1.17
LEASEE BE FREE	254	2.09	1.13
NO CASH > K2000	254	1.72	.93
DISCOURAGES BUS.	254	2.77	1.38
ABANDON CODE	254	2.82	1.32
ENFORCE CODE	254	2.80	1.37

PEARSON CORRELATION COEFFICIENTS

	NO BUSINESS OWNERSHIP	NO SUBLETTING PROPERTY	DISPOSE PROPERTY TO OTHERS	ALLOW DISPOSING TO FAMILY	LET LEASEE BE FREE TO DECIDE	NO CASH / DEPOSITS OVER K2000	CODE DISCOURAGES BUSINESSES	ABANDON CODE	ENFORCE CODE	FAITHFULLY PRACTISED
NO BUSINESS OWNERSHIP	1.00	.69**	.59**	.27**	.45**	.24**	.36**	.69**	.45**	-.04
NO SUBLETTING PROPERTY	.69**	1.00	.38**	.30**	.44**	.31**	.33**	.44**	.36**	-.06
DISPOSE PROPERTY TO OTHERS	.59**	.38**	1.00	.34**	.57**	.33**	.33**	.44**	.32**	.05
ALLOW DISPOSING TO FAMILY	.27**	.30**	.34**	1.00	.44**	.17*	.24**	.29**	.28**	.07
LET LEASEE BE FREE TO DECIDE	.45**	.44**	.57**	.44**	1.00	.33**	.33**	.46**	.42**	.01
NO CASH/ DEPOSITS OVER K2000	.24**	.31**	.33**	.17*	.33**	1.00	.29**	.26**	.31**	.15*
CODE DISCOURAGES BUSINESSES	.36**	.33**	.33**	.24**	.33**	.29**	1.00	.38**	.41**	-.08
ABANDON CODE	.69**	.44**	.44**	.29**	.46**	.26**	.38**	1.00	.71**	-.05
ENFORCE CODE	.45**	.36**	.32**	.28**	.42**	.31**	.41**	.71**	1.00	.04
CODE IS FAITHFULLY PRACTISED	-.04	-.06	.05	.73	.01	.15*	-.08	-.05	-.04	1.00

Key to Symbols: * - SIGNIF. LE .01 ** - SIGNIF. LE .001 (1-TAILED)

Table 10.1(c) Matrix of Pearson correlation of each item with all other items for businessmen

CODE STATEMENTS	NO.	MEAN	STD DEV
NO BUSINESS	193	2.54	1.34
NO SUBLETTING	193	2.23	1.14
DISPOSE PROPERTY	193	1.88	.88
ALLOW FAMILY	193	2.12	1.00
LEASES BE FREE	193	1.79	.92
NO CASH > £2000	193	1.62	.79
DISCOURAGES BUS.	193	2.79	1.19
ABANDON CODE	193	2.95	1.21
ENFORCE CODE	193	2.95	1.31
FAITHFULLY PRACT.	193	1.90	.97

PEARSON CORRELATION COEFFICIENTS

	NO BUSINESS OWNERSHIP	NO SUBLETTING PROPERTY	DISPOSE PROPERTY TO OTHERS	ALLOW DISPOSING TO FAMILY	LET LEASES BE FREE TO DECIDE	NO CASH / DEPOSITS OVER £2000	CODE DISCOURAGES BUSINESSES	ABANDON CODE	ENFORCE CODE	FAITHFULLY PRACTISED
NO BUSINESS OWNERSHIP	1.00	.46**	.20*	.14	.30**	.12	.02	.28**	.22**	.13
NO SUBLETTING PROPERTY	.46**	1.00	.20*	.13	.29**	.13	.08	.21*	.21*	.05
DISPOSE PROPERTY TO OTHERS	.16*	.20*	1.00	.41**	.41**	.33**	.18*	.21*	.27**	.07
ALLOW DISPOSING TO FAMILY	.14	.13	.41**	1.00	.42**	.10	.08	.19*	.20*	-.00
LET LEASES BE FREE TO DECIDE	.30**	.29**	.41**	.42**	1.00	.27**	.08	.28**	.26**	.01
NO CASH/ DEPOSITS OVER £2000	.12	.13	.33**	.10	.27**	1.00	.04	.18*	.12	.15
CODE DISCOURAGES BUSINESSES	.02	.08	.18*	.08	.08	.04	1.00	.03	.16	.17*
[illegible] CODE	.28**	.21*	.21*	.19*	.28**	.18*	.03	1.00	.52**	.31**
ENFORCE CODE	.22**	.21*	.27**	.20*	.26**	.12	.16	.52**	1.00	.27**
CODE IS FAITHFULLY PRACTISED	.13	.05	.07	-.00	.01	.15	.17*	.31**	.26**	1.00

Key to symbols: * - SIGNIF. LE .01 ** - SIGNIF. LE .001 (1-TAILED)

Table 10.2 Zambian Respondents' correlation matrix

CORRELATION MATRIX:

	NO BUSINESS OWNERSHIP	NO SUBLETTING PROPERTY	DISPOSE PROPERTY TO OTHERS	ALLOW DISPOSING TO FAMILY	LET LENDER BE FREE TO DECIDE	NO CASH / DEPOSITS OVER K2000	CODE DISCOURAGES BUSINESSES	ABANDON CODE	ENFORCE CODE	FAITHFULLY PRACTISED
NO BUSINESS OWNERSHIP	1.00									
NO SUBLETTING PROPERTY	.38	1.00								
DISPOSE PROPERTY TO OTHERS	.42	.43	1.00							
ALLOW DISPOSING TO FAMILY	.23	.25	.36	1.00						
LET LENDER BE FREE TO DECIDE	.42	.41	.33	.41	1.00					
NO CASH/ DEPOSITS OVER K2000	.20	.25	.32	.17	.33	1.00				
CODE DISCOURAGES BUSINESSES	.28	.25	.30	.20	.30	.19	1.00			
ABANDON CODE	.42	.37	.34	.21	.38	.19	.29	1.00		
ENFORCE CODE	.30	.43	.40	.22	.36	.23	.36	.64	1.00	
CODE IS FAITHFULLY PRACTISED	.01	-.04	.01	-.01	-.02	.09	.02	.07	.05	1.00

KAISER-MEYER-OLKIN MEASURE OF SAMPLING ADEQUACY = .83031
BARTLETT TEST OF SPHERICITY = 1645.4443, SIGNIFICANCE = .00000
THERE ARE 20 (22.2%) OFF-DIAGONAL ELEMENTS OF AIC MATRIX > 0.09

.TC7 Table 10.3 Zambian Respondents' Anti-Image Correlation Matrix@

Table 10.3 Zambian Respondents' Anti-Image Correlation Matrix

ANTI-IMAGE COVARIANCE MATRIX:

	NO BUSINESS OWNERSHIP	NO SUBLETTING PROPERTY	DISPOSE PROPERTY TO OTHERS	ALLOW DISPOSING TO FAMILY	LET LENDER BE FREE TO DECIDE	NO CASH / DEPOSITS OVER K2000	CODE DISCOURAGES BUSINESSES	ABANDON CODE	ENFORCE CODE	FAITHFULLY PRACTISED
NO BUSINESS OWNERSHIP	.56									
NO SUBLETTING PROPERTY	-.22	.59								
DISPOSE PROPERTY TO OTHERS	-.05	-.08	.60							
ALLOW DISPOSING TO FAMILY	.00	-.02	-.11	.80						
LET LENDER BE FREE TO DECIDE	-.07	-.05	-.16	-.16	.59					
NO CASH/ DEPOSITS OVER K2000	.03	-.06	-.10	.01	-.11	.84				
CODE DISCOURAGES BUSINESSES	-.03	-.01	-.05	-.04	-.05	-.05	.82			
ABANDON CODE	-.05	-.02	-.00	-.01	-.00	.01	-.02	.56		
ENFORCE CODE	-.10	-.01	-.06	-.00	.01	-.03	-.10	-.26	.30	
CODE IS FAITHFULLY PRACTISED	-.01	.06	-.00	.00	.04	-.09	-.01	-.05	-.01	.98

Table 9A.4 Zambian respondents' anti-image correlation matrix

ANTI-IMAGE CORRELATION MATRIX:

	NO BUSINESS OWNERSHIP	NO SUBLETTING PROPERTY	DISPOSE PROPERTY TO OTHERS	ALLOW DISPOSING TO FAMILY	LET LEADER BE FREE TO DECIDE	NO CASH / DEPOSITS OVER K2000	CODE DISCOURAGES BUSINESSES	ABANDON CODE	ENFORCE CODE	FAITHFULLY PRACTISED
NO BUSINESS OWNERSHIP	.85									
NO SUBLETTING PROPERTY	-.39	.86								
DISPOSE PROPERTY TO OTHERS	-.09	-.14	.89							
ALLOW DISPOSING TO FAMILY	.00	-.03	-.16	.87						
LET LEADER BE FREE TO DECIDE	-.11	-.08	-.27	-.24	.86					
NO CASH/ DEPOSITS OVER K2000	.04	-.08	-.14	.01	-.16	.87				
CODE DISCOURAGES BUSINESSES	-.05	-.01	-.08	-.06	-.08	-.06	.93			
ABANDON CODE	-.08	-.04	-.00	-.01	-.14	.01	-.03	.81		
ENFORCE CODE	-.19	-.09	-.11	-.00	.02	-.05	-.16	-.49	.81	
CODE IS FAITHFULLY PRACTISED	-.02	.07	-.00	.00	.05	-.10	-.01	-.06	-.02	.45

MEASURES OF SAMPLING ADEQUACY (MSA) ARE PRINTED ON THE DIAGONAL.

Table 9A.5 Initial statistics for computed eigenvalues for Zambian respondents (before rotation)

EXTRACTION OF FACTORS USING PRINCIPAL COMPONENTS ANALYSIS (PC)

INITIAL STATISTICS (BEFORE ROTATION):

VARIABLE	COMMUNALITY	*	FACTOR	EIGEN VALUE	% OF VAR	CUM
NO BUSINESS OWNERSHIP	1	*	1	3.78	37.8	37.8
NO SUBLETTING PROPERTY	1	*	2	1.08	10.8	48.6
DISPOSE PROPERTY TO OTHERS	1	*	3	1.03	10.3	58.9
ALLOW DISPOSING TO FAMILY	1	*	4	.83	8.3	67.2
LET LEADER BE FREE TO DECIDE	1	*	5	.81	8.1	75.2
NO CASH/ DEPOSITS OVER K2000	1	*	6	.70	7.0	82.2
CODE DISCOURAGES BUSINESSES	1	*	7	.55	5.5	87.7
ABANDON CODE	1	*	8	.48	4.8	92.5
ENFORCE CODE	1	*	9	.41	4.1	96.6
CODE IS FAITHFULLY PRACTISED	1	*	10	.34	3.4	100.0

PRINCIPAL COMPONENTS EXTRACTED 3 FACTORS.

Table 9A.6 Extracted unrotated 3 factor matrix for Zambians

FACTOR EXTRACTION USING PRINCIPAL COMPONENTS ANALYSIS (PC)

PC UNROTATED EXTRACTED 3 FACTORS.

FACTOR MATRIX:

	FACTOR 1	FACTOR 2	FACTOR 3
ENFORCE CODE	.73	.35	-.24
NO BUSINESS OWNERSHIP	.72	.09	-.27
DISPOSE PROPERTY TO OTHERS	.72	-.22	.17
LET LEADER BE FREE TO DECIDE	.72	-.29	.18
NO SUBLETTING PROPERTY	.70	-.05	-.22
ABANDON CODE	.68	.37	-.22
CODE DISCOURAGES BUSINESSES	.52	.09	.02
ALLOW DISPOSING TO FAMILY	.50	-.44	.30
CODE IS FAITHFULLY PRACTISED	.04	.68	.62
NO CASH/ DEPOSITS OVER K2000	.48	-.06	.53

Table 9A.7 Code Reproduced Correlation Matrix for Zambian Respondents

CODE REPRODUCED CORRELATION MATRIX FOR ZAMBIAN RESPONDENTS:

	NO BUSINESS OWNERSHIP	NO SUBLETTING PROPERTY	DISPOSE PROPERTY TO OTHERS	ALLOW DISPOSING TO FAMILY	LET LEADER BE FREE TO DECIDE	NO CASH / DEPOSITS OVER K2000	CODE DISCOURAGES BUSINESSES	ABANDON CODE	ENFORCE CODE	FAITH-FULLY PRACTISED
NO BUSINESS OWNERSHIP	.609	.02	-.04	-.01	-.03	.01	-.10	-.16	-.13	.09
NO SUBLETTING PROPERTY	.56	.548	-.05	-.06	-.07	.04	-.11	-.14	-.12	.10
DISPOSE PROPERTY TO OTHERS	.46	.48	.598	-.14	-.08	-.11	-.06	-.03	-.01	.03
ALLOW DISPOSING TO FAMILY	.24	.31	.39	.333	-.13	-.24	-.02	.10	.08	.10
LET LEADER BE FREE TO DECIDE	.45	.48	.41	.33	.633	-.11	-.06	.04	-.02	.04
NO CASH/ DEPOSITS OVER K2000	.18	.21	.43	.48	.44	.698	-.05	.02	.04	-.22
CODE DISCOURAGES BUSINESSES	.38	.36	.36	.23	.33	.24	.280	-.10	-.05	-.07
ABANDON CODE	.58	.51	.37	.11	.34	.17	.38	.636	-.05	-.07
ENFORCE CODE	.63	.55	.41	.14	.38	.19	.41	.68	.728	-.06
CODE IS FAITHFULLY PRACTISED	-.07	-.14	-.02	-.12	-.06	.31	.09	.14	.12	.858

THE LOWER LEFT TRIANGLE CONTAINS THE REPRODUCED CORRELATION MATRIX; THE DIAGONAL, COMMUNALITIES; AND THE UPPER RIGHT TRIANGLE, RESIDUALS BETWEEN THE OBSERVED CORRELATIONS AND THE REPRODUCED CORRELATIONS.

THERE ARE 28 (62.0%) RESIDUALS (ABOVE DIAGONAL) THAT ARE > 0.05

Table 9A.8 Zambian Respondents' ANOVA Analysis for Suggested Minimum Annual Salary of A Leader

D E S C R I P T I O N O F S U B P O P U L A T I O N S

Criterion Variable MINIMUM ANNUAL SALARY FOR A LEADER
Broken Down by ALL THREE ZAMBIAN RESPONDENTS' GROUP'S CATEGORY

Respondent's Classification	No.	Mean	Std Dev
For Entire Population	561	20715	18818
STUDENT	166	18095	15185
GRADUATE	224	22733	19912
BUSINESSMAN	171	22580	19817

F = 7; P = 0.0008 Total No. 653; No. Missing = 92 or 14%

Table 9A.9 Respondents' First Reason for Not Supporting Code By Zambian Respondent's Classification

First Reason for not Supporting Code	Type of Zambian Respondent: Student	Graduate	Businessman	Total
	No. / Row % / Col. %	No. / Row % / Col. %	No. / Row % / Col.%	No. / Row. %
Leaders Have Not Capital or Access to Means	41 / 32.0 / 69.5	50 / 39.1 / 56.8	37 / 28.9 / 42.7	128 / 62.1
Code Exists only on Paper	14 / 29.2 / 23.7	20 / 41.7 / 22.7	14 / 29.2 / 23.7	48 / 23.3
Other	4 / 13.3 / 6.8	18 / 60.0 / 20.5	8 / 26.7 / 13.6	30 / 14.6
Column Total No.	59	88	59	206
Column Total %	28.6	42.7	28.6	100.0

r^2 = 6; P = 0.2370; Cramer's V = 0.12; No. Missing = 447

Table 9A.10 Views on Whether Leader Should Not Solicit Property By Zambian Respondent's Classification

Leader Should Not Solicit his property:	Type of Zambian Respondent: Student	Graduate	Businessman	Total
	No. / Row % / Col. %	No. / Row % / Col. %	No. / Row % / Col.%	No. / Row. %
Disagree	99 / 24.6 / 54.7	157 / 39.1 / 61.8	146 / 36.3 / 74.9	402 / 63.8
Not Sure	27 / 40.9 / 14.9	22 / 33.3 / 8.7	17 / 25.8 / 8.7	66 / 10.5
Agree	55 / 34.0 / 30.4	75 / 46.3 / 29.5	32 / 19.8 / 16.4	162 / 25.7
Column Total No.	181	254	195	630
Column Total %	28.7	40.3	31.0	100.0

r^2 = 21; P = 0.0004; Cramer's V = 0.13; No. Missing = 13

Table 10.11 First Consequence of Leadership Code By Zambian Respondents' Classification

First Consequence of Leadership Code	Type of Zambian Respondent			
	Student	Graduate	Businessman	
	No. / Row % / Col. %	No. / Row % / Col. %	No. / Row % / Col. %	Total No. / Row %
Discourages Economic Development	21 / 27.6 / 42.0	42 / 55.3 / 55.3	13 / 17.1 / 19.7	76 / 39.6
Discourages Indigenous Businesses	8 / 26.7 / 16.0	9 / 30.0 / 11.8	13 / 43.3 / 19.7	30 / 15.6
Leads to Misery on Retirement	6 / 11.3 / 12.0	16 / 30.2 / 21.1	31 / 58.5 / 47.0	53 / 27.6
Other	15 / 45.5 / 30.0	9 / 27.3 / 11.8	9 / 27.3 / 13.6	33 / 17.2
Column Total No.	50	76	66	192
Column Total %	26.0	39.6	34.4	100.0

$\chi^2 = 34$; P = 0.0000; Cramer's V = 0.30; No. Missing = 461

Table 10.12 Views on Whether Code Should be Abandoned By Zambian Respondents' Classification

Code should be Abandoned	Type of Zambian Respondent			
	Student	Graduate	Businessman	
	No. / Row % / Col. %	No. / Row % / Col. %	No. / Row % / Col. %	Total No. / Row %
Agree	81 / 30.7 / 44.8	111 / 42.0 / 43.7	72 / 27.3 / 36.9	264 / 41.9
Not Sure	38 / 21.4 / 15.5	56 / 42.7 / 22.0	67 / 33.9 / 34.1	131 / 20.8
Disagree	72 / 30.6 / 39.8	87 / 37.0 / 34.3	76 / 32.3 / 39.0	235 / 37.3
Column Total No.	181	254	195	630
Column Total %	28.7	40.3	31.0	100.0

$\chi^2 = 6$; P = 0.1671; Cramer's V = 0.07; No. Missing = 23

Table 9A.13 Evaluation of Zambian Respondent's Knowledge of SEP By Evaluation of Respondent's Knowledge of SIDO

Evaluation of SEP	Evaluation of SIDO			
	Good	Average	Poor or No Idea	
	No. Row % Col. %	No. Row % Col. %	No. Row % Col.%	Total No. Row. %
Good	33 70.2 62.3	11 23.4 18.0	3 6.4 15.0	47 35.1
Average	19 30.2 35.8	41 65.1 67.2	3 4.8 15.0	63 47.0
Poor or No Idea	1 4.2 1.9	9 37.5 14.8	14 58.3 70.0	24 17.9
Column Total No.	53	61	20	134
Column Total %	39.6	45.5	14.9	100.0

X^2 = 68; P = 0.0000; Cramer's V = 0.50; No. Missing = 519

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UNDERGRADUATE STUDENT QUESTIONNAIRE - FINAL

R,01-03

* Respondent No.
* **********

UNIVERSITY OF ZAMBIA AT NDOLA
DEPARTMENT OF BUSINESS ADMINISTRAION
CAREER PLANS AND EXPECTATIONS AMONG SBIS UNDERGRADUATES
SELF-ADMINISTERED QUESTIONNAIRE
JULY - SEPTEMBER, 1988

SECTION I - Background Information: Personal
To help me classify your answers statistically, please give me some information about yourself. Make a tick [_/] in the box against the appropriate response.

IF THERE IS NO APPROPRIATE ANSWER, PLEASE INCLUDE YOUR OWN RESPONSE. FEEL FREE TO INCLUDE EXPLANATIONS OF YOUR VIEWS

Q1 07 [ ]

A. PERSONAL DATA.

1. Sex [ ]

2. Age(last birthday[[ ]

3. How many children are you in your nucleus family?

   No. of children .....

4. What is your sibling order(position) no. in line in your family)?

   Position No. .....

5. Marital status
   a. Married [ ]
   b. Single [ ]
   c other [ ]

6. Place of birth
   a. Southern [ ]
   b. Eastern [ ]
   c. Northern [ ]
   d. Luapula [ ]
   e. North-Western [ ]
   f. Western [ ]
   g. Copperbelt [ ]
   h. Central [ ]
   i. Lusaka [ ]
   j. Other Country specify.....

7. Your permanent home
   a. Southern [ ]
   b. Eastern [ ]
   c. Northern [ ]
   d. Luapula [ ]
   e. North-Western [ ]
   f. Western [ ]
   g. Copperbelt [ ]
   h. Central [ ]
   i. Lusaka [ ]
   j. Other Country specify.....

Q7 18 [ ]

Q2 08 [ ]

Q3 10 [ ]

8. Your current residential home
   a. Southern [ ]
   b. Eastern [ ]
   c. Northern [ ]
   e. North-Western [ ]
   f. Western [ ]
   g. Copperbelt [ ]
   h. Central [ ]
   i. Lusaka [ ]
   j. Other Country specify.....

Q4 12 [ ]

Q8 20 [ ]

Q5 14 [ ]

9. Type of degree
   a. Business Admin(B.A)[ ]
   b. Accountancy (B.A) [ ]
   c. Other .....

Q6 16 [ ]

Q9 22

10 Year of Study (not length of stay)
   a. 1st year [ ]
   b. 2nd year [ ]
   c. 3rd year [ ]
   d. 4th year 1985/86 [ ]

Q10 23

SECTION II - Background Information: Parents

TO HELP ME CLASSIFY YOUR ANSWERS STATISTICALLY, PLEASE KINDLY RESPOND TO THE FOLLOWING QUESTIONS.

Q11 25 [ ]

B. EDUCATION, LOCATION

11. Father's highest educational level attained.
   a. Grade 6/ old std 5 & below [ ]
   b. Grade 7 or old std 6 [ ]
   c. Jnr. Sec.ed. old form II or new form III [ ]
   d. Snr. Sec.ed.(old form IV & VI or new Form V [ ]
   e. Three year college [ ]
   f. Bachelor's degree [ ]
   g. Masters degree [ ]
   h. PhD [ ]
   i. Had no opportunity to go to school [ ]

12. Mother's highest educational level attained.
   a. Grade 6/ & below [ ]
   b. Grade 7 or old std 6 [ ]
   c. Jnr. Sec.ed. old form II or new form III [ ]
   d. Snr. Sec.ed.(old form IV & VI or new Form V [ ]
   e. Three year college [ ]
   f. Bachelor's degree [ ]
   g. Masters degree [ ]
   h. PhD [ ]
   i. Had no opportunity [ ]

13. In which province (or country if not Zambia) was each of your parents BORN?
   a. Father.....
   b. Mother.....

14. In which province (or country if not Zambia) has each of your parents LIVED MOST of their time
   a. Father.....
   b. Mother.....

15. In which province do your parents LIVE NOW?
   a. Father lives in .....
   b. Father is dead [ ]
   c. I don't know [ ]
   c. Mother lives in .....
   d. Mother is dead [ ]
   e. I don't know [ ]

16. How many YEARS ago did they MOVE to where they live now? Q16a 37-38 [ ]
   a. No. of years .....
   b. They have always lived in the same province [ ] Q16b 39 [ ]
   c. I Don't know [ ]

C. WORKING EXPERIENCE

17. What is the type of organisation your father has worked in (or worked in last if he no longer works), for most of the time? Q17 40-41 [ ]
   a. Farming [ ]
   b. Govt. Dept./Min. [ ] Q12 28 [ ]
   c. Public Statutory board [ ]
   d. Parastatal Company [ ]
   e. Large private firm [ ]
   f. Medium private firm [ ]
   g. Small private firm [ ]
   h. Own business firm [ ]
   i. Cannot remember [ ]
   j. Other : State.....

Q18

18. Your father's occupation, that is the main kind of work he does, or his last job if he no longer works. 42-43 [ ]
   a. Peasant farming [ ] Q13a 27-28 [ ]
   b. Commercial farming [ ] Q13b
   c. Unskilled/ semi-skilled / skilled 29-30 [ ]
   d. Teaching Pr./Sec.Sc [ ]
   e. Lecturing Coll./Uni [ ] Q14a 31 [ ]
   f. Civil Service [ ]
   g. Businessman [ ] Q14b 32
   h. Low white collar [ ]
   i. Supervisor/foreman [ ]
   j. Middle mgt./ Snr. professional [ ] Q15a 33-34 [ ]
   k. High managerial/ professional [ ]
   l. None [ ] Q15d
   m. Don't know [ ] 35-36 [ ]
   n. Other: specify.....

19. What kind of work does your mother do or what was her lase job if she no longer works?

a. Peasant farming [ ]
b. Commercial farming [ ]
c. Unskilled/ semi-skilled / skilled [ ]
d. Teaching Pr./Sec.Sc [ ]
e. Lecturing Coll./Uni [ ]
f. Civil Service [ ]
g. Businessman [ ]
h. Low white collar [ ]
i. Supervisor/foreman [ ]
j. Middle mgt./ Snr. professional [ ]
k. High managerial/ professional [ ]
l. None [ ]
m. Don't know [ ]
n. Other: specify.....

D. PARENTS' BUSINESS OWNERSHIP.

18. Has any of your parents ever owned business organisation? a

i) a. Yes, Father does [ ]
b. Type of business .....
c. No father does not [ ]
d. Don't know [ ]

ii e. Yes, Mother does [ ]
f. Type of bus.....
g. No mother does not [ ]
h. Don't know [ ]

Q18 30-31 [___]
Q19 32 [___]
b 330 [___]
c 34 [___]
c 35 [___]

SECTION III: ALTERNATIVE CAREER PLANS AND EXPECTATIONS

21. What type of activity WOULD YOU like to be engaged in FIRST for your career after graduation (were not limited to the Zambian and had a choice)? (Select one only)

i. Employment:
a. Salaried employment [ ]
b. Self-employment [ ]

ii. Education:
c. Professional accounting qualification stud. [ ]
d. Management prof.stud [ ]
e. Masters degree stud. [ ]
f. Ph.D. degree studies [ ]
g. Other: specify.....

22. What type of occupation would YOU LIKE to be enganged in FIRST immediately after leaving university (assuming you were free to choose)?

a. Paid job in commercial farming [ ]
b. Self-employed in commercial farming [ ]
c. Self-employed businessman (woman) [ ]
d. Teaching- Sec. School [ ]
e. Teaching- College/ University [ ]
f. Civil service [ ]
g. Low level white collar (Clerical etc. [ ]
h. Supervisor or foreman [ ]
i. Middle management/ Senoir professional [ ]
j. Professional account. [ ]
k. High managerial/prof [ ]
l. Don't know yet [ ]
m. Other: specify ....

Q21(i) 52 [ ]
Q21(ii) 53 [ ]
Q22 54-55

23. Type of organisation you WOULD LIKE TO WORK in FIRST immediately after leaving university (assuming you were free to do so)

a. Farming [ ]
b. Government department or ministry [ ]
c. Public statutory board [ ]
d. Parastatal company [ ]
e. Large Private firm [ ]
f. Medium Private firm [ ]
g. Small Private firm [ ]
h. Own business firm [ ]
i. Not yet decided [ ]
j. Other: state.....

24. Is this job in the same industry as the one your father works in (or worked if he no longer works)?

a. No [ ]
b. Yes [ ]

25. Type of organisation YOU WILL MOST LIKELY WORK IN FIRST immediately after leaving university (taking the bonding into consideration)

a. Farming [ ]
b. Government department or ministry [ ]
c. Public statutory board [ ]
d. Parastatal company [ ]
e. Large Private firm [ ]
f. Medium Private firm [ ]
g. Small Private firm [ ]
h. Own business firm [ ]
i. Don't know [ ]
j. Other: State .....

26 Have you worked in a small business?

(i) a. No [ ]
b. Yes [ ]

(ii) If yes for how ling?

....No. of years..Months (even if discontinuous)

27 After graduation, would you desire to work in a small business

a. Immediately after [ ]
b. One year after [ ]
c. Two years after [ ]
d. 3-5 years later [ ]
e. At some future point [ ]
f. Not at all [ ]
g. Don't know [ ]

28. Why do you say so?

29. After graduation, do you plan to start your own business

a. Immediately after [ ]
b. One year after [ ]
c. Two years after [ ]
d. 3-5 years later [ ]
e. At some future point [ ]
f. Not at all [ ]
g. Don't know [ ]

30. Why do you say so?

Q 23 56-57 [___]

Q28(i) 61 [ ]

Q28(ii) 62-63 [ ]

Q27 64 [ ]

Q24 58 [___]

Q28 65 [ ]

Q25 59-60 [ ]

Q29 6752 [___]

Q30 66 [ ]

SECTION IV: ADEQUACY OF SBIS UNDERGRADUATE DEGREE AND FACTORS INFLUENCING EMPLOYMENT IN SMALL AND LARGE FIRMS

The following is a series of statements that cover a range of issues associated with adequacy of the SBIS undergraduate degree programme in preparing students seeking careers in the small business field. In addition factors that may INFLUENCE YOU or DISUADE YOU from working in small or a large business organisation immediately after completing your undergraduate degree are presented. Please tick [_/] your response to each of these statements on a five-point scale of 'strongly agree' to 'strongly disagree' to indicate the extent of your agreement or disagreement with it.

	Strongly Agree	Agree	Not sure	Dis-agree	Strongly disagree	R4
31 I feel that the undergraduate degree programme will						
						Q31a 72 [ ]
a. Not prepare me to take up a paid job in a small business						
						Q31b 73 [ ]
b. Not equip me with the necessary skills to successfully start a business firm						
						Q31c 74 [ ]
c. Prepare me to take up employment in a large business organisation						

The following factors would <u>influence</u> me to take up a paid job in a <u>small</u> <u>firm</u> because

	Strongly Agree	Agree	Not sure	Dis-agree	Strongly disagree	R4
32 It offers a challenging and interesting job:						
						Q32a 76 [ ]
a. Ability to take initiatives						
						Q32b 77 [ ]
b. There are opportunities for taking up additional jobs						
						Q32c 78 [ ]
c. High involvement in decion making						

	Strongly Agree	Agree	Not sure	Dis-agree	Strongly disagree	B4
						R2
33. There is close personal or friendly relationship with the owner since :						Q33a 07 [ ]
a. I would be treated like one of the owners						
b. I would have a feeling of belongingness to my own organisation						Q33b 08 [ ]
c. I would have a feeling that my contribution is welcome						Q33c 09 [ ]
34 It acts as a training ground for starting own firm by.....						
a. Using it as testing ground to start up own firm.....						Q34a 10 [ ]
b. Offering a chance to get experience... ...						Q34b 11 [ ]

The following factors would <u>dissuade</u> me from taking up a paid job in <u>SMALL FIRM</u> because

	Strongly Agree	Agree	Not sure	Dis-agree	Strongly disagree	B4
35 Lack of job security by working in a small firm because:						Q35a 12 [ ]
a. Of difficulty of getting the right small organisation to work in						
b. It is too small with little scope for development						Q35c 13 [ ]
36. Resource constraints (e.g. financial) inhibiting implementation of plans.....						Q36 14 [ ]
37 Poor working relationship with workmates arising from: Difficulty of getting cooperation of workmates						Q37 15 [ ]

	Strongly Agree	Agree	Not sure	Dis-agree	Strongly disagree	R4
The following factors would <u>influence</u> me in taking up a paid job in a <u>LARGE FIRM</u>: Challenging and interesting work due to:						Q38a 16 [ ]
38. High status in society due to:						
a. High salary.....						Q38b 17 [ ]
b. Availability of support or facilitating services.....						Q38c 18 [ ]
c. Opportunity to be in charge of many departments						Q38d 19 [ ]
d. More power than in a small firm						
39. There is availability of resources: To implement plans...						Q39 20 [ ]
.....						
40. Training ground: To learn a job & gain experience helpful in starting business.						Q40 21 [ ]
41. Job security since:						Q41a 22 [ ]
a. I cannot be sacked easily.....						Q41b 23 [ ]
c. There is predictable working atmosphere ...						
The following factor will <u>dissuade</u> me from taking up salaried employment in a <u>LARGE</u> firm:						
42. Too bureaucratic leading to:						Q42 24
b. Difficulty of initiating changes change.....						

SECTION V PLEASE PROVIDE ME WITH SOME INFORMATION REGARDING GOVERNMENT'S BUSINESS PROMOTIONAL PROGRAMMES AND THE POLICY OF PROHIBITING LEADERS FROM FORMING BUSINESSES.

43. LEADERSHIP CODE:EXPLANATION OF THE MEANING OF LEADERSHIP CODE:

Leadership code is a subsidiary to the Constitution of Zambia. It basically forbids a leader, that is any Zambian (except those in private enterprises) with a salary of at least K2,500 p.a. (as of 1974) to "carry on any BUSINESS"; to own or occupy land save the land, not exceeding ten hectres in extent on which his dwelling house is situated"; to sublet his property including his own house ("unless he is transferred" S.4(3). Nowithstanding, he is exempted if he elects not to receive a salary S.5. Under the Act, a leader is required to dispose of all property or assets to a person other than his spouse or child. Property or assets exclude cash and bank deposits if the total amount does not exceed K2,000 S.9(4).

FOLLOWING IS A SERIES OF STATEMENTS THAT COVER ISSUES REGARDING THE LEADERSHIP CODE. PLEASE TICK [_/] YOUR RESPONSE TO EACH OF THE STATEMENTS ON A FIVE-POINT SCALE OF 'STRONGLY AGREE' TO 'STRONGLY DISAGREE' TO INDICATE THE EXTENT OF YOUR AGREEMENT OR DISAGREEMENT WITH IT.

	Strongly Agree	Agree	Not sure	Dis-agree	Strongly disagree	R4
a. A leader should not carry on any business.....						43a28 [ ]
b. A leader should not sublet his property						b.27 [ ]
c. On assumption of office, a leader should dispose of all property or assets to a person other than his spouse or child						c. 28 [ ]
d. On assumption of office, a leader should be free to dispose of all property or assets to any person(including his spouse or child)						d.29 [ ]
e. On assumption of office, a leader should be free to decide what to do with his assets.....						e.30 [ ]
f. A leader should not possess cash and bank deposits exceeding K2,000.....						f.31 [ ]
g. The code discourages people from starting business.....						g.32 [ ]
h. The code should be						h.33

abandoned.....							[ ]
i. Leadership Code should be effectively implemented.....							i.34 [ ]
j. Leadership Code is faithfully practiced by all in Zambia.....							j.35 [ ]

k. What do you think should be the minimum annual for a person to be regarded as a leader? K..... k 36-40 [ ]

l. If you have any other views on the Leadership Code, please write them on this page below, and additional pages if necessary

GOVERNMENT BUSINESS PROMOTIONAL PROGRAMMES

44. Have you ever heard of Small Enterprise Promotion Ltd.'? (SEP)
a. No [ ]
b. Yes [ ]
IF NO, SKIP TO Q.47

45. IF YES, TO Q.44
Do you know what SEP IS?
a. No [ ]
b. Yes
IF NO, SKIP TO Q.47

46. In which three most important activities is SEP involved?

47. Have you ever heard of 'Small Industries Development Organisation? (SIDO)?
a. No [ ]
b. Yes [ ]

48. If YES, to Q.47
Do you know what SIDO is?
a. No [ ]
b. Yes [ ]
IF NO, SKIP TO Q.50

49. In which three most important activities is SIDO involved?

GOVERNMENT ASSISTANCE TO SMAL FIRMS

50. What is your view on a policy of assisting ALL BUSINESSES (small or large) by the Government when being formed and after in other promotional programmes?

Q44 44 [ ]
Q48 50 [ ]
Q45 45 [ ]
Q49 51-53 [ ]
Q46 46-48 [ ]
Q47 49 [ ]
Q50 54 [ ]

51. Explain why you say so in the above question

52. What is your view on policy of assisting only SMALL FIRMS when being formed and after in other promotional programmes?

    Why do you say so?

53. What is your opnion on a GOVERNMENT POLICY OF assiting already ESTABLISHED SMALL firms only?

    Why do you say so?

54. What is your opnion on a policy of not providing any government assistance to any firms? Why do you say so?

Q51 55

Q53 57 [ ]

Q52 56 [ ]

Q54 58 [ ]

Q.55 Your Additional comments regarding this questionnaire if any:

Thank you very much indeed for answering the questionnaire. If you have any other additional points please write them below this page.

Should you wish to have a summary of results of this study, please put your name at the bottom of this page. If you wish to know more about the study, contact me.

Name:

Your reliable contact address in 1988:

CHAMA, FINAL GRADUATE STUDENT QUESTIONNAIRE

UNIVERSITY OF STIRLING
DEPARTMENT OF BUSINESS AND MANAGEMENT

* Respondent Number ************************

CAREER PLANS AND EXPERIENCES AMONG SBIS GRADUATES
SELF-ADMINISTERED QUESTIONNAIRE JULY - SEPTEMBER, 1986

PLEASE DO NOT WRITE IN THIS COLUMN.

R1
R.01-03 [ ]

SECTION I - Background Information: Personal

To help me classify your answers statistically, please kindly give me some information about yourself. Make a tick [✓] in the box against the appropriate response.

IF THERE IS NO APPROPRIATE RESPONSE, PLEASE INCLUDE YOUR OWN ANSWER

A. PERSONAL DATA.

1. Sex
   - Male [ ]
   - Female [ ]

Q1 08 [ ]

2. Age (last birthday) [ ]

Q2 08-09 [ ]

3. What is your sibling order (position number in line in your family)?

   Position No._____

Q3 10 [ ]

4. Marital status
   - a. Married [ ]
   - b. Single [ ]
   - c. Other [ ]

Q4 11 [ ]

5. Place of birth
   - a. Southern [ ]
   - b. Eastern [ ]
   - c. Northern [ ]
   - d. Luapula [ ]
   - e. North-Western [ ]
   - f. Western [ ]
   - g. Copper-belt [ ]
   - h. Central [ ]
   - i. Lusaka [ ]
   - j. Other: specify_____

Q5 12-13 [ ]

6. Your permanent home
   - a. Southern [ ]
   - b. Eastern [ ]
   - c. Northern [ ]
   - d. Luapula [ ]
   - e. North-Western [ ]
   - f. Western [ ]
   - g. Copper-belt [ ]
   - h. Central [ ]
   - i. Lusaka [ ]
   - j. Other: specify_____

Q6 14-15 [ ]

7. In which province is your current residential home situated?

   Residential Home is in _____

Q7 16-17 [ ]

8. Highest educational level you have attained.
   - a. Bachelor's degree but not completed [ ]
   - b. Bachelors degree [ ]
   - c. Masters degree [ ]
   - d. Ph.D degree [ ]

Q8 18 [ ]

9. Major field of study of your highest qualifications.
   - a. Business management [ ]
   - b. Accountancy [ ]
   - c. Other [ ]

Q9 19 [ ]

10. Other qualifications since you obtained your undergraduate degree
    - a. Professional accountancy [ ]
    - b. Other qualifications obtained_____
    - c. Studying for Diploma in Accountancy [ ]
    - d. Studying for Diploma in Management [ ]
    - e. Studying for Diploma in Marketing [ ]
    - f. Studying other courses (specify) _____
    - g. None [ ]

Q10 20 [ ]

11. Type of SBIS UNZANDO undergraduate degree
    - a. Business Admin.(B.A.) [ ]
    - b. Accountancy (B.Ac) [ ]

Q11 21 [ ]

12. Year you graduated 198____

Q12 22-23 [ ]

SECTION II - Background Information: Parents

TO HELP ME CLASSIFY YOUR ANSWERS STATISTICALLY, PLEASE KINDLY RESPOND TO THE FOLLOWING QUESTIONS

B. EDUCATION, LOCATION

13. Father's highest educational level attained.
   a. Grd 6/old std 5 & below [ ]
   b. Grade 7or old Std. 6 [ ]
   c. Jnr.,Sec.ed., (Old form II or new form III) [ ]
   d. Snr.,Sec.ed.,(Old form IV & VI or new form V) [ ]
   e. Three years college [ ]
   f. Univ. Bachelors degree [ ]
   g. Univ. Masters degree [ ]
   h. University, Ph.D [ ]
   i. Did not have an opportunity to go to school [ ]

14. Mother's highest educational level attained.
   a. Grd. 6/old std 5 & below [ ]
   b. Grade 7 or old Std. 6 [ ]
   c. Jnr.,Sec., (Old form II or new form III) [ ]
   d. Snr.,Sec.ed., (Old form IV & VI or new form V) [ ]
   e. Three year college [ ]
   f. Univ. Bachelors degree [ ]
   g. Univ. Masters degree [ ]
   h. University, Ph.D [ ]
   i. Did not have an opportunity to go to school [ ]

15. In which province (or country if not Zambia) was each of your parents BORN?
   a. Father.....
   b. Mother.....

16. In which province (or country if not Zambia) has each of your parents LIVED MOST of his/her time? (IF EQUAL TIME, ENTER also b and d.
   a. Father.....
   b. Father.....
   c. Mother.....
   d. Mother.....

17. In which province (or country if not Zambia) do your parents LIVE NOW? Q17a 34 Q17b 35 Q17d 36 Q17e 37
   a) Father lives in.....
   b) Father is dead [ ]
   c) I don't know [ ]
   d) Mother lives in.....
   e) Mother is dead [ ]
   f) I don't know [ ]

18. How many YEARS ago did they MOVE to where they live now Q13 26 Q18a 38-39 Q18b 40 Q14 27
   a. (i) Father - Number of years.....
   b. He has always lived in the same province [ ]
   c. Father is dead [ ]
   d. I don't know [ ]
   e. Mother - No. of years.....
   f. She has always lived in the same province [ ]
   g. Mother is dead [ ]
   h. I don't know [ ]

C. WORKING EXPERIENCE

19. What is the type of organisation your father worked in (or worked in last if he no longer works), for most of the time? Q19 44-45
   a. Farming [ ]
   b. Govt.Depart.or Ministry [ ]
   c. Public statutory board [ ]
   d. Parastatal company [ ]
   e. Large private firm [ ]
   f. Medium private firm [ ]
   g. Small private firm [ ]
   h. Own business firm [ ]
   i. Can not remember [ ]
   j. Other: State.....

Q16a 30 Q16b 31 Q16c 32 Q16d 33

SECTION II - CONTINUED

20. What is (was if dead or no longer working) your father's main occupation (work)?
- a. Peasant farming [ ]
- b. Commercial farming [ ]
- c. Unskilled, semi-skilled or skilled manual [ ]
- d. Teaching Pr./Sec.Sch. [ ]
- e. Lecturing Coll./Univ. [ ]
- f. Civil service [ ]
- g. Businessman [ ]
- h. Low level white collar [ ]
- i. Supervisor or foreman [ ]
- j. Middle mgt/Snr prof'nal [ ]
- k. High managerial/prof'nal [ ]
- l. None [ ]
- m. I don't know [ ]
- n. Other: specify..... [ ]

21. What is (was if dead or no longer working) your mother's main paid occupation (work)?
- a. Peasant farming [ ]
- b. Commercial farming [ ]
- c. Unskilled, semi-skilled or skilled manual [ ]
- d. Teaching Pr./Sec.Sch. [ ]
- e. Lecturing Coll./Univ. [ ]
- f. Civil service [ ]
- g. Businesswoman [ ]
- h. Low level white collar [ ]
- i. Supervisor or foreman [ ]
- j. Middle mgt/Snr prof'nal [ ]
- k. High managerial/prof'nal [ ]
- l. None [ ]
- m. I don't know [ ]
- n. Other: specify [ ]

Q20 46-47 [ ]

Q21 48-49 [ ]

D. PARENTS' BUSINESS OWNERSHIP

22. Has any of your parents ever owned a business organisation?

i) a. Yes, Father does [ ]
b. Type of business
.....
c. No [ ]
d. I don't know [ ]

ii) e. Yes, Mother does [ ]
f. Type of business
.....
g. No [ ]
h. I don't know [ ]

Q22a 50 [ ]
Q22b 51 [ ]
Q22c 50 [ ]
Q22e 52 [ ]
Q22f 53 [ ]
Q22g 53 [ ]

SECTION III: ALTERNATIVE CAREER PLANS AND EXPERIENCES

23. What type of activity WERE YOU engaged in FIRST after graduation? (Select one only).

i. Employment:
- a. Salaried employment [ ]
- b. Self employment [ ]

ii. Education:
- c. Professional accounting qualification studies [ ]
- d. Management prof. studies [ ]
- e. Masters degree studies [ ]
- f. Ph.D degree studies [ ]
- g. Other: specify..... [ ]

iii. None yet [ ]

24. What type of occupation WERE YOU engaged in FIRST after leaving university?
- a. Paid job in commercial farm [ ]
- b. Self-employed in commercial farming [ ]
- c. Self-employed businessman (woman) [ ]
- d. Teaching Sec.Sch. [ ]
- e. Teaching - Coll./Univ. [ ]
- f. Civil service [ ]
- g. Low level white collar (Clerical etc) [ ]
- h. Supervisor or foreman [ ]
- i. Middle mgt/Senior professional [ ]
- j. Professional accountant [ ]
- k. High managerial/profess [ ]
- l. None yet [ ]
- m. Other: specify..... [ ]

Q23 54 [ ]

Q24 55-56 [ ]

25. Type of organisation you WORKED in FIRST after leaving university.
- a. Farming [ ]
- b. Government department or Ministry [ ]
- c. Public statutory board [ ]
- d. Parastatal company [ ]
- e. Large private firm [ ]
- f. Medium private firm [ ]
- g. Small private firm [ ]
- h. Own business firm [ ]
- i. None yet [ ]
- j. Other: State [ ]

26. When did you get your FIRST job ever or become a businessman for the first time?
- a. Before coming to university [ ]
- b. Before final exams [ ]
- c. After final exams but before knowing results [ ]
- d. Three months after results [ ]
- e. 4 to 6 months after results [ ]
- f. 12 months after results [ ]
- g. I am not yet employed [ ]

IF NOT EMPLOYED, SKIP TO Q.32

27. How did you get your FIRST job ever, or self-employment?
- a. Government bonding [ ]
- b. Univers. placement scheme [ ]
- c. Newspaper advert. by comp [ ]
- d. Minist. of labour exchange [ ]
- e. Personal newspaper advert. [ ]
- f. Personal contact w/ comp. [ ]
- g. Family contact w/ organ. [ ]
- h. Started own firm alone [ ]
- i. Bought existing firm [ ]
- j. Inherited business from family [ ]
- k. Other: Specify .....

IF SELF-EMPLOYED, SKIP TO Q.33
IF NOT FAMILY CONTACT, SKIP TO Q.29

28 If family member contacted organisation, who was it? [ ]
- a. Father [ ]
- b. Mother [ ]
- c. Brother [ ]
- d. Sister [ ]
- e. Uncle [ ]
- f. Aunt [ ]
- g. Other: Specify.....

29. Have you ever thought of leaving your present job? Q25 57-58
- a. No [ ]
- b. Yes [ ]
- c. Sometimes [ ]

Q29 63

30. If yes, or sometimes, are you seriously looking for another job at the moment? Q30 64
- a. No [ ]
- b. Yes [ ]

31. What would your main reason be for leaving (one only)? Q26 59
- a. To get more money [ ]
- b. To get promotion [ ]
- c. To get security [ ]
- d. Boredom [ ]
- e. Start own business [ ]
- f. Lack of prospects in present firm [ ]
- g. To get more interesting job [ ]
- h. To travel/emigrate [ ]
- i. Frustration in present job [ ]
- j. To get more experience [ ]
- k. I don't know [ ]

Q31 65-66

Q27 60-61

SKIP TO Q.35

32 If you have NOT YET, SECURED employment, what is the most important reason for this? (ONLY ONE). Q32 67-68
- a. Lack of jobs [ ]
- b. It is too early [ ]
- c. Too much corruption [ ]
- d. I have other plans [ ]
- e. Waiting to go for further studies [ ]
- f. I do not want to start working now [ ]
- g. I will go into self-employment [ ]
- h. Other reasons: Specify..... [ ]

Q28 62

33. What course among the courses you took at SBIS, have you found most valuable (or do you think will be, if you are not yet working) in your career? PLEASE WRITE IN FULL INCLUDING THE COURSE CODE. (ONE ONLY). Q33 69
1.....
2.....
3.....

34. What do you think was the least valuable course that you took at SBIS (in full please with code)?

.....

35. If you were going to University again, which course would you like to take that you did not take? (Please be specific).

.....

36. If you were leaving university again next week, what type of organisation WOULD YOU choose to make your career in?

a. Farm [ ]
b. Government department or Ministry [ ]
c. Public statutory board [ ]
d. Parastatal company [ ]
e. Large private firm [ ]
f. Medium private firm [ ]
g. Small private firm [ ]
h. Own business firm [ ]
i. I don't know [ ]
j. Other: State [ ]

37. What type of job would it be (in full)?

.....

38. Would this job be in an organisation which would be in the same industry as the one you work in now?

a. No [ ]
b. Yes [ ]

39. What type of organisation do YOU NOW WORK IN?

a. Farming [ ]
b. Government department or Ministry [ ]
c. Public statutory board [ ]
d. Parastatal company [ ]
e. Large private firm [ ]
f. Medium private firm [ ]
g. Small private firm [ ]
h. Own business firm [ ]
i. None [ ]
j. Other: State [ ]

39a. If none, what is the most important reason for not being out of employment?

40. If salaried or self-employed, what is your present job title?

.....

41. Give your present job description very briefly, but precisely.

.....

.....

42. What was the total average number of employees in the organisation in 1985 or when you last worked in? (Please attempt to make an estimate if not sure)

a. No. of employees .....
b. Can not make an estimate [ ]

43. Have you ever worked in a small business organisation?

a. No [ ]
b. (i) Yes [ ]
(ii) If yes, for how long? Total No. of months .....

44. When would you like to work in a small business?

a. Six months after graduation [ ]
b. One year after graduation [ ]
c. Two years later [ ]
d. 3-5 years later [ ]
e. At some point in the future [ ]
f. Not at all [ ]
g. I don't know [ ]

45. Explain why you say so?

46. When do you plan to start your own business?

a. Already own a business [ ]
b. Within six months after graduation [ ]
c. One year after grad. [ ]
d. Two years after grad. [ ]
e. 3-5 years after grad. [ ]
f. 6-10 years after grad. [ ]
g. At some time in the future [ ]
h. Not at all [ ]
i. I don't know [ ]

IF NOT AT ALL, SKIP TO Q.51,
DO NOT ANSWER Q.47-50.
IF DON'T KNOW, SKIP TO Q.52.

Q34 70 [ ]
Q42a 07-11 [ ]
Q42b 12 [ ]
Q35 71 [ ]
Q43a 13 [ ]
Q43b 14-15 [ ]
Q35 72-73 [ ]
Q44 16 [ ]
Q37 74-75 [ ]
Q45 17 [ ]
Q38 76 [ ]
Q46 18 [ ]
Q39 77 [ ]
Q39a 78 [ ]
Q40 79 [ ]
Q41 80 [ ]

R2

47. If you OWN or would LIKE to OWN a business, what is your important reason? (ONE ONLY).
    a. Get rich [ ]
    b. To make more money than by being employed [ ]
    c. Personal achievement [ ]
    d. Independence or autonomy [ ]
    e. Has the necessary skills [ ]
    f. Has good education [ ]
    g. Security [ ]
    h. Only alternative available [ ]
    i. To make up for endured personal and family hardships during childhood [ ]
    j. Availability of a ready market for the product [ ]
    k. Contribute to economic development [ ]
    l. Provision of employment to others [ ]
    m. Help government to reduce unemployment [ ]
    n. Other (specify) .....

- IF YOU ALREADY OWN A FIRM NOW, SKIP TO Q.52.

48. If you would LIKE TO OWN, what kind of business would it be?
    a. Related to the present job [ ]
    b. Related to the present industry [ ]
    c. Unrelated to the present job [ ]
    d. Unrelated to the present industry [ ]
    e. I don't know [ ]
    f. Other (specify) .....

49. Have you begun to make any serious preparations to start a business?
    a. No [ ]
    b. Yes [ ]

50. What kind of preparations?
    a. Getting loan capital [ ]
    b. Making savings [ ]
    c. Looking for premises [ ]
    d. Looking for partner [ ]
    e. Training for extra [ ]
    f. skills [ ]
    g. None [ ]
    h. Other (specify) .....

SKIP TO Q.52

51. If you WOULDN'T LIKE TO OWN, what is the most important reason for this?
    a. Too much responsibility [ ]
    b. Lack of personal skills [ ]
    c. Lack of capital [ ]
    d. Cannot find suitable partner [ ]
    e. I am too young [ ]
    f. Other: (specify) .....

Q47 19 [ ]
Q50 23 [ ]
Q51 24 [ ]
Q48 21 [ ]
Q49 22 [ ]

SECTION IV: ADEQUACY OF SBIS UNDERGRADUATE DEGREE PROGRAMME AND FACTORS INFLUENCING EMPLOYMENT IN SMALL AND LARGE BUSINESS FIRMS. R2

The following is a series of statements that cover a range of issues associated with adequacy of the SBIS undergraduate degree programme in preparing students seeking careers in the small business field. In addition factors that may INFLUENCE YOU or DISUADE YOU from working in small or a large business organisation immediately after completing your undergraduate degree or higher degree are presented.
Please tick [✓] your response to each of these statements on a five-point scale of 'I strongly agree' to 'I strongly disagree' to indicate the extent of your agreement or disagreement with it.

	I Strongly Agree	I Agree	I am Not Sure	I Disagree	I Strongly Disagree	
52. I feel that the undergraduate degree programme:-						
a. Did not adequately prepare me to take up a paid up job in a small business firm						Q52a 26
b. Did not adequately equip me with the necessary skills to successfully start a business firm						Q52b 27
c. Prepared me to take up employment in a large business organisation						Q52c 28

IF YOU OWN A BUSINESS AND YOU ARE NOT IN A SALARIED EMPLOYMENT, SKIP TO PAGE 10, SECTION V, Q. 58 OR ELSE CONTINUE.

I consider the following factors to be important to influence me to take up a paid job in a small firm because:

	I Strongly Agree	I Agree	I am Not Sure	I Disagree	I Strongly Disagree	
53. It offers a challenging and interesting job:						
a. Ability to take initiatives						Q53a 29
b. There are opportunities for taking up additional jobs						Q53b 30
c. High involvement in decision making						Q53c 31

	I strongly Agree	I agree	I am Not Sure	I dis-agree	I strongly Dis-agree	
54. There is close personal or friendly relationship with the owner since						
a. I would be treated like one of the owners						54a 32
b. I would have a feeling of belonging to my own organisation						b 33
c. I would have a feeling that my contribution is welcome						c 34
55. It acts as a training for starting own firm by:						
a. Using it as testing ground to start up own firm						55 35
b. Offering a chance to get experience						b 36

I consider the following factors to be important to disuade me from taking up a paid job in A SMALL FIRM:

56. Lack of job security by working in a small firm because:						56a 37
a. Of difficulty of getting the right small organisation to work in						
b. It is too small with little scope for development						56b 38
57. Resource Constraints (e.g. financial) inhibiting implementation of plans.						57 39
58. Poor working relationship with workmates arising from the difficulty of getting cooperation of workmates						58 40
59. High status in society due to:						59a 41
a. High salary						
b. Availability of support or facilitating services						59b 42
c. Opportunity to be in charge of many departments						59c 43
d. More power than in a small firm						59d 44
60. There is availability of resources to: implement plans.						60 45

	I strongly Agree	I agree	I am Not Sure	I dis-agree	I stro-ngly Dis-agree	
61. Training ground to learn a job and gain experience useful in starting up own business						Q61 46
62. Job security since:						
a. I can not be sacked easily						Q62a 47
b. There is predictable working atmosphere						Q62b 48

I consider the following factor to be important to dissuade me from taking up salaried employment in a large firm.

63. Too bureaucratic leading to the difficulty of initiating changes						Q63 49

USE THIS SPACE FOR YOUR ADDITIONAL COMMENTS REGARDING SBTS COURSES AND EMPLOYMENT IN A SMALL OR A LARGE FIRM.

CHAMA, FINAL GRADUATE STUDENT QUESTIONNAIRE

SECTION V: PLEASE PROVIDE ME WITH SOME INFORMATION REGARDING GOVERNMENT'S BUSINESS PROMOTIONAL PROGRAMMES AND THE POLICY OF PROHIBITING LEADERS FROM FORMING BUSINESSES.

CA. LEADERSHIP CODE: - EXPLANATION OF THE MEANING OF LEADERSHIP CODE:

Leadership code is a subsidiary to the Constitution of Zambia Cap. 1. It basically forbids a leader, that is any Zambian (except those in private enterprises) with a salary of at least K2,500 (as of 1974), to "carry on any business"; to "own or occupy land save the land, not exceeding ten hectares in extent on which his dwelling house is situated"; to sublet his property including his own house ("unless he is transferred" S.4(3). Notwithstanding, he is exempted if he elects not to receive a salary S.5. Under the Act, a leader is required to dispose of all property or assets to a person other than his spouse or child. Property or assets exclude cash and bank deposits if the total amount does not exceed K2,000 S.9(4).

FOLLOWING IS A SERIES OF STATEMENTS THAT COVER SEVERAL ISSUES REGARDING THE LEADERSHIP CODE: PLEASE TICK [✓] YOUR RESPONSE TO EACH OF THE STATEMENTS ON A FIVE POINT SCALE OF 'I STRONGLY AGREE' TO 'I STRONGLY DISAGREE' TO INDICATE THE EXTENT OF YOUR AGREEMENT OR DISAGREEMENT WITH IT. THERE ARE NO RIGHT OR WRONG ANSWERS. WHAT IS IMPORTANT IS YOUR HONEST FEELING.

	I Strongly Agree	I Agree	I Not Sure	I Disagree	I Strongly Disagree	
a. A leader should not carry on any business						6Ba 51
b. A leader should not sublet his property or house						b 52
c. On assumption of office, a leader should dispose of all property or assets to a person other than his spouse or child						c 53
d. On assumption of office, a leader should be free to dispose of all his property or assets to any person (including his spouse or child)						d 54
e. On assumption of office, a leader should be free to decide what to do with his assets.						e 55
f. A leader should not possess cash and bank deposits exceeding K2,000						f 56
g. The Code discourages people from starting up businesses						g 57
h. The code should be abandoned						h 58
i. Leadership Code should be effectively enforced.						i 59
j. Leadership Code is faithfully practiced by all in Zambia						j 60

k. What do you think should be the minimum annual salary (as per present law which defines a leader in terms of salary) for a person to be regarded as a leader? (Please make an estimate even if you would not like the Code to be implemented).

K.....

k 61-65

CHAMA, FINAL GRADUATE STUDENT QUESTIONNAIRE

LEADERSHIP CODE CONTINUED

1. If you have any other views on the Leadership code, please write them on this page below, and additional pages if necessary.

1 66.67 ☐

CHAMA, FINAL GRADUATE STUDENT QUESTIONNAIRE

GOVERNMENT BUSINESS PROMOTIONAL PROGRAMMES

65. Have you ever heard of 'Small Enterprise Promotion Ltd.'? (SEP)
    a. No [ ]
    b. Yes [ ]
    If NO, SKIP TO Q. 68

66. If YES, to Q. 65 do you know what SEP is?
    a. No [ ]
    b. Yes [ ]
    If NO, SKIP to Q.68

67. In which three most important activities is SEP involved?

58. Have you ever heard of 'Small Industries Development Organisation'? (SIDO)
    a. No [ ]
    b. Yes [ ]
    IF NO, SKIP TO Q.71

69. If YES, to Q.68 do you know what SIDO is?
    a. No [ ]
    b. Yes [ ]
    IF NO, SKIP TO Q.71

70. In which three most important activities is SIDO involved?

GOVERNMENT ASSISTANCE TO SMALL FIRMS

71. What is your view on a policy of assisting ALL BUSINESSES (small or large) by the Government when being formed and after in other promotional programmes

72. Explain why you say so in the above question.

Q65 69 [ ]
Q70 74 [ ]
Q66 70 [ ]
Q67 71 [ ]
Q71 75 [ ]
Q68 72 [ ]
Q69 73 [ ]
Q72 76 [ ]

CHAMA, FINAL GRADUATE STUDENT QUESTIONNAIRE

GOVERNMENT BUSINESS PROMOTIONAL PROGRAMMES CONTINUED

73. What is your view on a policy of assisting only SMALL FIRMS when being formed and after in other promotional programmes? Why do you say so?

Q73 77

75. What is your opinion on a policy of not providing any government assistance to any firm? Why do you say so?

Q75 79

74. What is your opinion on a government policy of assisting already ESTABLISHED SMALL firms only? Why do you say so?

Q74 78

76. Your Additional Comments regarding this questionnaire if any:

Q76 80

Thank you very much for answering the questionnaire. If you have any other additional points, please write them on this page.

Should you wish to have a summary results of this study, please put your name at the bottom of this page. If you wish to know more about the study, contact me.

Your name:

Your reliable contact address in 1988:

PAGINATION
ERROR

ZAMA, FINAL SMALL BUSINESSMEN QUESTIONNAIRE

R1

Time interview began .....
Time interview ended .....

Length of interview .....
Name of interviewer: .....

Signature .....

1. Respondent Number 01-03
2. Date .....
3. Location of interview (area) .....
4. (Town): a. Lusaka [ ] 04
   b. Ndola [ ]
   c. Kitwe [ ]
5. Province a. Lusaka [ ] 05
   b. Central [ ]
   c. Copperbelt [ ]
6. ISIC No. .....

SECTION I: BUSINESS-START-UP-AND-PERFORMANCE:
I WOULD LIKE TO LEARN ABOUT HOW YOU STARTED YOUR BUSINESS AND HOW YOU HAVE BEEN OPERATING SINCE THEN

IF THERE IS NO APPROPRIATE RESPONSE, AS RESPONDENT TO INCLUDE HIS OWN ANSWER. RESPONSES SUCH AS N/A MEANING NOT APPLICABLE OR CROSSING OUT OR SKIPPING ARE NOT HELPFUL IN ANALYSIS OF DATA AS THEY ARE CONFUSING.

Q. TYPE OF BUSINESS

1. What type of manufacturing firm is this? [ ]
   a. Metals [ ]
   b. Bricks, pottery glass, cement [ ]
   c. Chemicals and man-made fibres [ ]
   d. Metal goods, n.e.s. [ ]
   e. Mechanical engineering [ ]
   f. Office machinery and data processing equip. [ ]
   g. Electrical and electronic engineering [ ]
   h. Instrument engineering [ ]
   i. Food, drink and tobacco [ ]
   j. Textile industry [ ]
   k. Leather and leather goods [ ]
   l. Clothing and footwear [ ]
   m. Timber and wooden furn. [ ]
   n. Paper, paper products; printing and publishing [ ]
   o. Processing of rubber and plastics [ ]
   p. Other manufacturing indu. [ ]
   SHOW CARD TO RESPONDENT

2. Type of Registration
   a. Business Name [ ]
   b. Limited Company [ ]
   COPY FROM LIST

3. Year this firm was Registered 07 Q1 08
   a. 1965
   b. 1970
   c. 1975
   d. 1980
   e. 1981
   f. 1982
   g. 1983 Q2 09
   h. 1984
   i. 1985
   DO NOT ASK RESPONDENT COPY FROM LIST:

4. What is the type of ownership in this firm? Q3 10
   a. Individual proprietorship [ ]
   b. Partnership [ ]
   c. Co-operative Society [ ]
   d. Private Limited Company [ ]
   e. Public Limited Company [ ]
   f. Parastatal Organisation [ ]
   g. Other [ ] Q4 11

INMOVERS

5. In which town was the present firm initially located when you started
   a. Town .....
   b. It has always been in this town [ ] Q5 12

CHAMA, FINAL SMALL BUSINESSMEN QUESTIONNAIRE

6. Was the business, you initially started, related to the type of industry you worked in for most of your time?
   a. No [ ]
   b. Yes [ ]

7. Are you still a salaried employee in another organisation?
   a. No [ ]
   b. Yes [ ]

S. ESTABLISHMENT OR ENTERPRISE UNIT & DETERMINATION OF SMALL FIRM.

8. How many business firms do you now have?
   No. of firms .....

LENGTH OF TIME IN BUSINESS

9. In what year did you start the first business?
   In 19 ___ (No. of years ___)

10. In what year did you start operating this business?
   a. In 19___ (No. of years ___)
   b. It is not yet in operation [ ]

11. If not operational, what is the most important reason for this?
   a. Lack of personal finance [ ]
   b. Can not obtain bank loan [ ]
   c. Still waiting for SIDO's support [ ]
   d. Still waiting for DBZ/SEP's support [ ]
   e. Lack of foreign exchange [ ]
   f. Machinery on order/imported [ ]
   g. No longer interested in project [ ]
   h. Still planning [ ]
   i. Other:

L. MOTIVES & REASONS FOR ENTREPREN.

12. What would you say was the most important reason that motivated or influenced you to start your business?
   a. Get rich [ ]
   b. To make more money than being employed [ ]
   c. Personal achievement [ ]
   d. Independence or autonomy [ ]
   e. Had the necessary skills [ ]
   f. Had good education [ ]
   g. Security [ ]
   h. Only alternative available [ ]
   i. Endured personal and family hardships during childhood [ ]
   j. There was ready market for the product [ ]
   k. Contribute to economic development [ ]
   l. Provision of employment to others [ ]
   m. Help government to reduce unemployment [ ]
   n. Other (specify):.....

DO NOT READ OUT, RECORD WHATEVER RESPONDENT STATES.

M. START UP PROC. & INDUSTR. EXPER.

13. Who in the family influenced you most in starting a business?
   a. Father [ ]
   b. Mother [ ]
   c. Brother/Sister [ ]
   d. Other relatives [ ]
   e. Friends [ ]
   f. Myself [ ]
   g. My wife [ ]
   h. I cannot remember [ ]

Q6 13 [ ]
Q12 22-23 [ ]
Q7 14 [ ]
Q8 15-16 [ ]
Q9 17-18 [ ]
Q10 19-20 [ ]
Q11 21 [ ]
Q13 24 [ ]

CHAMA, SMALL BUSINESSMEN QUESTIONNAIRE

CONTINUATION VERBATISM INFORMATION RESPONDENT NO.

INDICATE QUESTION NUMBER

CHAMA, FINAL SMALL BUSINESSMEN QUESTIONNAIRE

O. ASSIS. & PROCESS OF ENTR-SHIP

14. How did you become a businessman or own this firm?
    a. Started bus. from scratch [ ]
    b. Government agency assisted me to start [ ]
    c. Private agency assisted [ ]
    d. Family inheritance [ ]
    e. Purchased existing one [ ]
    f. Joined partner in existing firm [ ]
    g. Other: specify.....

IF NOT INHERITED, SKIP TO Q.16

15. If inherited, from whom?
    a. Father [ ]
    b. Mother [ ]
    c. Brother/Sister [ ]
    d. Uncle [ ]
    e. Other [ ]

16. How much capital did you initially have when you started?
    (i) Total capital only: K.....
    (as stated by respondent)
    (ii) Total official capital K.....
    (as recorded by Registrar of companies. Copy from list).

17. How did you raise the initial capital to start the business or to become self-employed?
    a. Own savings [ ]
    b. Family loan [ ]
    c. Family grant [ ]
    d. Bank loan [ ]
    e. Government agency [ ]
    f. Private agency [ ]
    g. Other: Specify.....

2 OR 3 ANSWERS POSSIBLE RATE FROM FIRST TO LAST

IF NOT GOVERNMENT OR PRIVATE AGENCY, SKIP TO Q. 20, OTHERWISE GO TO Q. 18 IF GOVERNMENT OR Q.19 IF PRIVATE.

18. If assisted by a GOVERNMENT AGENCY, WHICH ONE?
    a. .....
    b. Type of ASSISTANCE, TWO most important ones, in a rank order.
    i)
    ii)
    c. Amount of financial assistance if any
    Total amount K.....

19. If assisted by a PRIVATE agency, which one?
    a. .....
    b. Type of assistance, TWO most important ones, in a rank order.
    i)
    ii)
    c. Amount of financial assistance if any
    Total amount K.....

P. AWARENESS, AVAILABILITY & UTILIZATION OF FINANCIAL FACILITIES.

20. Have you ever applied for a business loan?
    a. No [ ]
    b. Yes [ ]
    IF YES, SKIP TO Q. 23
    OTHERWISE CONTINUE

21. IF NO, would you LIKE to apply for a BUSINESS loan?
    a. No [ ]
    b. Yes [ ]
    IF YES, SKIP TO Q.26
    OTHERWISE CONTINUE

22. If you have NOT APPLIED or would NOT LIKE to apply for a business loan, what is the most important reason?
    a. Do not like debts [ ]
    b. No point since I would not qualify [ ]
    c. Too high interest [ ]
    d. Not aware of where to apply to [ ]
    e. Other: Specify.....
    .....

SKIP TO Q.26

Q14 25
Q18a 32
Q18b 35-37
Q18c 38-42
Q15 26
Q19a 43
Q19b 44-48
Q19c 46-50
Q18 27-31
Q20 51
Q17 32-4
Q21 52
Q22 53

23. If you have APPLIED for a BUSINESS loan, to which organisation?
    a. Bank [ ]
    b. Government [ ]
    c. Small Enter.Promotion [ ]
    d. Small Industr.Dev. Organ. [ ]
    e. Other: Specify.....
    .....

    RECORD WHATEVER RESPONDENT STATES.

24. If you have ever APPLIED how many times have you been successful?
    No. of Times .....
    ASK FOR AN ESTIMATE

25. How much were you given at the first and the last times if you can remember?
    a. First time K.....
    b. Last time K.....

26. What is the total number of managers in this firm?
    No. of managers.....
    EXPLAIN MEANING OF MANAGERS AS: A MANAGER IN THIS CASE REFERS TO ANY PERSON WHO IS IN CHARGE OF A GROUP OF PEOPLE, INCLUDING SUPERVISORS.

27. How many Managers are responsible to the chief executive?
    No. of managers .....

28. Total number of employees in ALL YOUR business FIRMS in 1985 (Jan. - Dec.) (include owner)
    a. Full time (excl family).....
    b. Full time Family members.....
    c. Part time (half day).....
    Total .....

29. Total initial number of employees in this organisation when it started operating (Not necessarily when registered)
    a. Full time (excl. family).....
    b. Family members.....
    c. Part time)half day).....
    Total .....

30. Total number of employees when firm obtained a manufacturing licence.
    No. of employees.....
    (COPY FROM LIST).

Q23 54 [ ]
Q27 [ ] 70. [ ]
Q24 55-56 [ ]
Q28a 71-75 [ ]
Q28b 76-80 [ ]
Q28c 7-11 [ ]
Q28d 12-16 [ ] R2
Q25a 57-61 [ ]
Q25b 62-66 [ ]
Q29a 17-21 [ ]
Q29b 22-26 [ ]
Q29c 27-31 [ ]
Q29d 32-36 [ ]
Q26 67-68 [ ]
Q30 37-41 [ ]

CHAMA, FINAL SMALL BUSINESSMEN QUESTIONNAIRE

31. Total number of employees in THIS business firm in the following years indicated
IF FIRM HAD NOT YET BEEN FORMED IN EARLIER YEARS, MARK THE NOT YET FORMED COLUMN.

ASK FOR LEAFLET ALREADY SENT, OR ANNUAL ACCOUNTS/REPORTS TO COPY FROM. ASSURE RESPONDENTS OF STRICT CONFIDENTIALITY AND ANONYMITY.

(Jan. - Dec.) (Include owner

	Full time	Family members	Part time	Total	Not formed
a.1965					
b.1970					
c.1975					
d.1980					
e.1982					
f.1983					
g.1984					
h.1985					

REMEMBER TO GET BACK RESPONSES ON THIS PAPER. THEY ARE THE BACKBONE OF THIS RESEARCH. A QUESTIONNAIRE WITHOUT SUCH INFORMATION WILL BE REGARDED AS INCOMPLETE.

32. Please kindly provide me with some information on the performance of your firm.

ASK FOR ANNUAL REPORT.

'85	Total fixed assets	Gross/ Total sales	Gross/ Total profit	Net Profit

33. What is the additional number of employees if you anticipate the labour force to increase by Dec. 1980?
a. No. of employees [ ]
b. No increase

34. What is the additional number of employees if you anticipate the labour force to increase by Dec. 1987?
a. No. of employees [ ]
b. No increase expected

R2
Q31a 42-56
Q31b 57-71
Q31c 72-80
Q31d 11-28
Q31e 29-43
Q31f 44-58
Q31g 59-73
Q31h 74-80
R4 &
7-14
Q32 15-19
20-24
25-29
30-34
33a 35-36
33b 37
34a 38-39
34b 40

CHAMA, FINAL BUSINESSMEN QUESTIONNAIRE

SECTION II: PLEASE PROVIDE ME WITH SOME INFORMATION REGARDING GOVERNMENT'S BUSINESS PROMOTIONAL PROGRAMMES AND THE POLICY OF PROHIBITING LEADERS FROM FORMING BUSINESSES.

AWARENESS OF SUPPORT AGENCIES

35. Have you ever heard of 'Small Enterprise Promotion Ltd.'? (SEP)
a. No [ ]
b. Yes [ ]
IF NO, SKIP TO Q.32

36. If YES, TO Q. 35
Do you know what SEP is?
a. No [ ]
b. Yes [ ]
IF NO, SKIP TO Q.32

37. In which three most important activities is SEP involved?

38. Have you ever heard of 'Small Industries Development Organisation'? (SIDO)
a. No [ ]
b. Yes [ ]
If NO, SKIP TO Q.41

39. If YES, to Q.38
do you know what SIDO is?
a. No [ ]
b. Yes [ ]
IF NO, SKIP TO Q.41

40. In which three most important activities is SIDO involved?

GOVERNMENT ASSISTANCE TO SMALL FIRM

41. What is your view on a policy of assisting ALL BUSINESSES (small or large) by the Government when being formed and after in other promotional programme?

42. Explain why you say so in the above question

43. What is your view on a policy of assisting only SMALL FIRMS when being formed and after in other promotional programmes?

44. What is your opinion on a GOVERNMENT POLICY OF assisting already ESTABLISHED SMALL firms only?

45. What is your opinion on a policy of not providing any government assistance to any firm?

R4
Q35 42 [ ]
Q42 54-55 [ ]
Q36 43 [ ]
Q43 56-57 [ ]
Q37 44-45 [ ]
Q38 47 [ ]
Q44 58-59 [ ]
Q39 48 [ ]
Q40 49-51 [ ]
Q45 60-61 [ ]
Q41 52-53 [ ]

CHAMA, FINAL SMALL BUSINESSMEN QUESTIONNAIRE

ATTITUDES TOWARDS THE LEADERSHIP CODE

EXPLAIN THE MEANING OF A LEADER TO RESPONDENT
GIVE HIM THE QUESTIONNAIRE TO COMPLETE THIS PAGE.

46. LEADERSHIP CODE: - EXPLANATION OF THE MEANING OF LEADERSHIP CODE:

Leadership code is a subsidiary to the Constitution of Zambia . . . It basically forbids a leader, that is any Zambian (except those in private enterprises) with a salary of at least K2,500 P.A.(as-of [illegible] any BUSINESS"; to "own or occupy land save the land, not exceeding ten hectares in extent on which his dwelling house is situated"; to sublet his property including his own house ("unless he is transferred" S.4(3). Notwithstanding, he is exempted if he elects not to receive a salary S.5. Under the Act, a leader is required to dispose of all property or assets to a person other than his spouse or child. Property or assets exclude cash and bank deposits if the total amount does not exceed K2,000 S.9(4).

FOLLOWING IS A SERIES OF STATEMENT THAT COVER SEVERAL ISSUES REGARDING THE LEADERSHIP CODE. PLEASE TICK [✓] YOUR RESPONSE TO EACH OF THE STATEMENTS ON A FIVE POINT SCALE OF 'STRONGLY AGREE' TO 'STRONGLY DISAGREE' TO INDICATE THE EXTENT OF YOUR AGREEMENT OR DISAGREEMENT WITH IT.

	Strongly Agree	Agree	Not Sure	Disagree	Strongly Disagree	R4 Q46a-c
a. A leader should not carry on any business						64
b. A leader should not sublet his property or house						65
c. On assumption of office, a leader should dispose of all property or assets to a person other than his spouse or child						66
d. On assumption of office, a leader should be free to dispose of all property or assets to any person (including his spouse or child)						67
e. On assumption of office, a leader should be free to decide what to do with his assets						68
f. A leader should not possess cash and bank deposits exceeding K2000						69
g. The code discourages people from starting up businesses						70
h. The code should be abandoned						71
i. Leadership Code should be effectively implemented						72
j. Leadership Code is faithfully practised by all in Zambia						73-77

k. What do you think should be the minimum annual salary for a person to be regarded as a leader? K .....

l. Do you have any other issues regarding leadership code?

78-79

CONTINUE ON NEXT PAGE

SECTION III - Background Information: Personal

To help me classify your answers statistically, please kindly give me some information about yourself. Make a tick [✓] in the box against the appropriate response.

IF THERE IS NO APPROPRIATE RESPONSE, PLEASE INCLUDE YOUR OWN ANSWER

A. PERSONAL DATA.

47. Sex — Male [ ] Female [ ]

48. Age (last birthday).....years

49. What is your sibling order (position number in line in your family)?
Position No. .....

50. Marital status
a. Married [ ]
b. Single [ ]
c. Other [ ]

51. If still married, for how long have you been married?
No. of Years .....

C. ORIGIN AND MIGRATION

52. In which province (or country if not Zambia) were you born?
a. Southern [ ]
b. Eastern [ ]
c. Northern [ ]
d. Luapula [ ]
e. North-Western [ ]
f. Western [ ]
g. Copper-belt [ ]
h. Central [ ]
i. Lusaka [ ]
j. Other country specify .....

SHOW CARD TO RESPONDENT

53. What is your citizenship:
a. Zambian [ ]
b. Other: Specify .....

54. Which province (or countr if not Zambia) would you refer to as your permanent home?
Province .....
Country .....

55. Your current residential home
a. Southern [ ]
b. Eastern [ ]
c. Northern [ ]
d. Luapula [ ]
e. North-Western [ ]
f. Western [ ]
g. Copper-belt [ ]
h. Central [ ]
i. Lusaka [ ]
j. Other: Specify .....

D. EDUCATION AND TRAINING

56. What is the highest educational level you have attained for which you hold a certificate?
a. Did not have an opportunity to go to school [ ]
b. Grd 6/old std 5 & below [ ]
c. Grade 7 or old std. 6 [ ]
d. Jnr., Sec.ed., (Old form II or new form III) [ ]
e. Snr., Sec.ed., (Old form IV & VI or new form V) [ ]
f. Three or four year college [ ]
g. Bachelor's degree [ ]
h. Masters degree [ ]
i. Ph.D degree [ ]

RECORD WHATEVER RESPONDENT STATES

FS

047 7 [ ]

048 8-9 [ ]

049 10 [ ]

055 20-21 [ ]

050 11 [ ]

051 12-13 [ ]

056 22 [ ]

052 14-15 [ ]

053 16-17 [ ]

054 18-19 [ ]

CONTINUED ON NEXT PAGE

SECTION III - CONTD.)

15

57. Major field of study of your highest educational qualifications.

Field of study.....

058 24-25

58. Year you completed school or graduated
19.....

(COMPARE WITH Q.5)

59. Did you undertake any trade, apprenticeship or training after leaving school?

a. No [ ]
b. Yes [ ]
IF NO SKIP TO Q.62
OTHERWISE CONTINUE

060 27

60. What type of trade/apprenticeship or training did you undergo?
1.....
2.....
UP TO TWO MOST IMPORTANT

061 28

61. How many years did the training take?
..... Years

C. OWNERSHIP, WORKING EXPERIENCE AND SIZE OF FIRM

062 29

62. What type of activity WERE YOU engaged in FIRST immediately after graduation?
i. Employment:
a. Salaried employment [ ]
b. Self employment [ ]
c. None yet [ ]

ii. Education:
d. Professional accounting qualification studies [ ]
e. Management prof. studies [ ]
f. Masters degree studies [ ]
g. Ph.D degree studies [ ]
h. Other: specify.....

063 30-31

63. What is the type of organisation you worked in for most of the time before becoming a businessman?
a. Farming [ ]
b. Govt. Department or Ministry [ ]
c. Public statutory board [ ]
d. Parastatal company [ ]
e. Large private firm [ ]
f. Medium private firm [ ]
g. Small private firm [ ]
h. Own business firm [ ]
i. Can not remember [ ]
j. Other: Specify.....

IF NONE SKIP TO Q.69

064 32

64. What was the total number of employees in this organisation?
No. of employees.....

065 37-38

65. What was your main occupation, that is the main kind of work you did before owning a business?
a. Peasant farming [ ]
b. Commercial farming [ ]
c. Unskilled, semi-skilled skilled manual [ ]
d. Teaching: Pr./Sec.Sch. [ ]
e. Lecturing: Coll./Univ [ ]
f. Civil service [ ]
g. Businessman [ ]
h. Low level white collar [ ]
i. Supervisor or foreman [ ]
j. Middle mgt./Semi-prof.nal [ ]
k. High management/prof.nal [ ]
l. None [ ]
m. Don't know [ ]
n. Other: specify [ ]

066 39

66. Was this job in the same industry as the one your father works in (or worked in if he no longer works)?
a. No [ ]
b. Yes [ ]

SECTION IV - Background Information: Parents

TO HELP ME CLASSIFY YOUR ANSWERS STATISTICALLY, PLEASE KINDLY RESPOND TO THE FOLLOWING QUESTIONS

B. EDUCATION, LOCATION

70. Father's highest educational level attained.
- a. Did not have an opportunity to go to school [ ]
- b. Grd 5/old std 5 & below [ ]
- c. Grade 7 or old Std. 6 [ ]
- d. Jnr.,Sec.ed., (Old form II or new form III) [ ]
- e. Snr.,Sec.ed., (Old form IV & VI or new form V) [ ]
- f. Three or four year college [ ]
- g. Bachelors degr [ ]
- h. Masters degree [ ]
- i. Ph.D degree [ ]
- j. Don't know [ ]

71. Mother's highest educational level attained.
- a. Did not have an opportunity to go to school [ ]
- b. Grd 5/old std 5 & below [ ]
- c. Grade 7 or old Std. 6 [ ]
- d. Jnr.,Sec.ed., (Old form II or new form III) [ ]
- e. Snr.,Sec.ed., (Old form IV & VI or new form V) [ ]
- f. Three or four year college [ ]
- g. Bachelors degr [ ]
- h. Masters degree [ ]
- i. Ph.D degree [ ]
- j. Don't know [ ]

72. In which province (or country if not Zambia) was each of your parents BORN?
- i) a. Father ..... [ ]
  b. Don't know
- ii) a. Mother ..... [ ]
  b. Don't know

73. In which province (or country if not in Zambia) has each of your parents LIVED MOST of his/her time?
- i) a. Father ..... [ ]
  b. Don't know
- ii) a. Mother ..... [ ]
  b. Don't know

74. In which province (or country if not Zambia) do your parents LIVE NOW?
- a) Farmer in ..... [ ]
- b) Dead [ ]
- c) Don't know [ ]

75. How many YEARS ago did they MOVE to where they live now?
- i) a. Number of years .....
- ii) a. They have always lived in the same province [ ]
  b. Dead [ ]
  c. Don't know [ ]

C. WORKING EXPERIENCE

76. What is the type of organisation your father has worked in (or worked in last if he no longer works), for most of the time?
- a. Farming [ ]
- b. Govt.Depart.or Ministry [ ]
- c. Public statutory board [ ]
- d. Parastatal company [ ]
- e. Large private firm [ ]
- f. Medium private firm [ ]
- g. Small private firm [ ]
- h. Own business firm [ ]
- i. Can not remember [ ]
- j. Other: State .....

77. What is (was) your father's main occupation (work)
- a. Peasant farming [ ]
- b. Commercial farming [ ]
- c. Unskilled, semi-skilled skilled manual [ ]
- d. Teaching: Pr./Sec. Sch. [ ]
- e. Lecturing: Coll./Univ. [ ]
- f. Civil service [ ]
- g. Businessman [ ]
- h. Low level white collar [ ]
- i. Supervisor or foreman [ ]
- j. Middle mgt/Snr prof.nal [ ]
- k. High managerial/prof.nal [ ]
- l. None [ ]
- m. Don't know [ ]
- n. Other: Specify

Q70 45-46
Q74 57-58
Q75ai 59-60
Q75bii 61
Q71 47-48
Q76 62-63
Q721 49-50
Q72ii 51-52
Q77 64-65
Q731 53-54
Q73ii 55-56

78. What is (was) your mother's main paid occupation (work)?

a. Peasant farming [ ]
b. Commercial farming [ ]
c. Unskilled, semi-skilled or skilled manual [ ]
d. Teaching- Pr./Sec. Sch. [ ]
e. Lecturing- Coll./Univ. [ ]
f. Civil service [ ]
g. Low level white collar [ ]
h. Businessman [ ]
i. Supervisor or foreman [ ]
j. Middle mgt/Snr prof-nal [ ]
k. High managerial/prof-nal [ ]
l. None [ ]
m. Don't know [ ]
n. Other: specify [ ]

D. PARENTS' BUSINESS OWNERSHIP

79. Has any of your parents ever owned a business organisation?

i)
a. Yes, Father does [ ]
b. Type of business .....
c. Yes, Mother does [ ]
d. Type of business .....

ii)
e. No [ ]

iii)
f. Don't know [ ]

078 66-67 [ ]
079a 68 [ ]
079b 69 [ ]
079c 70 [ ]
079d 71-72 [ ]
079e 73 [ ]

80. Are there any other issues that have not been covered in this questionnaire that you would like to comment on?

080 74-80 [ ]

Thank you very much for answering the questionnaire.

Should you wish to have a summary results of this study, please put your name at the bottom of this page. If you wish to know more about the study, contact me.

Name:

Contact Address:

UNIVERSITY OF ZAMBIA AT NDOLA

SMALL BUSINESS SUPPORT AGENCIES QUESTIONNNAIRE

Respondent's No.... Q1-03
Date .....

1. What types of facilities or assistance do you presently offer to manufacturing firms? Q1 07 08

2. What types of criteria do you use in providing facilities or assistance? Q2 09 10

3. What is your view on the Bank of Zambia's Loan Guarantee Scheme as an effective source of loan to small firms? Q3 11 12

4. What is your view on an argument that loan finance to small firms will continue to be provided by commercial institutions according to commercial criteria, with the government playing only a peripheral part? Q4 13 14

5. What is your view on the arguments that banks should take a more aggressive approach to financing small and new businesses because first this is a potentially profitable and high growth area, and second that banks, as responsible and substantial corporate citizens have a duty to foster the growth of new enterprises wherever possible!

Q5 15 16 ____

6. Do you think that higher levels of (a) security, (b) interest rates and (c) bank charges to small firms hinders high growth rate and development of these small firms which are viewed as the seedbed of a nation's economic growth? (d) Should Zambian Banks relax their high demands to encourage growth of small firms and health economy in the long term?

Q6a17 ____

Q6b18 ____

Q6c19 ____

Q6d20 ____

7. What do you think should be the interest rate on loans to small firms?

Q7 21 22 ____

8. What facilities or assistance do you plan to offer to small firms in the future as a way of encouraging small firm generation and economic development?

Q8 23 24 ____